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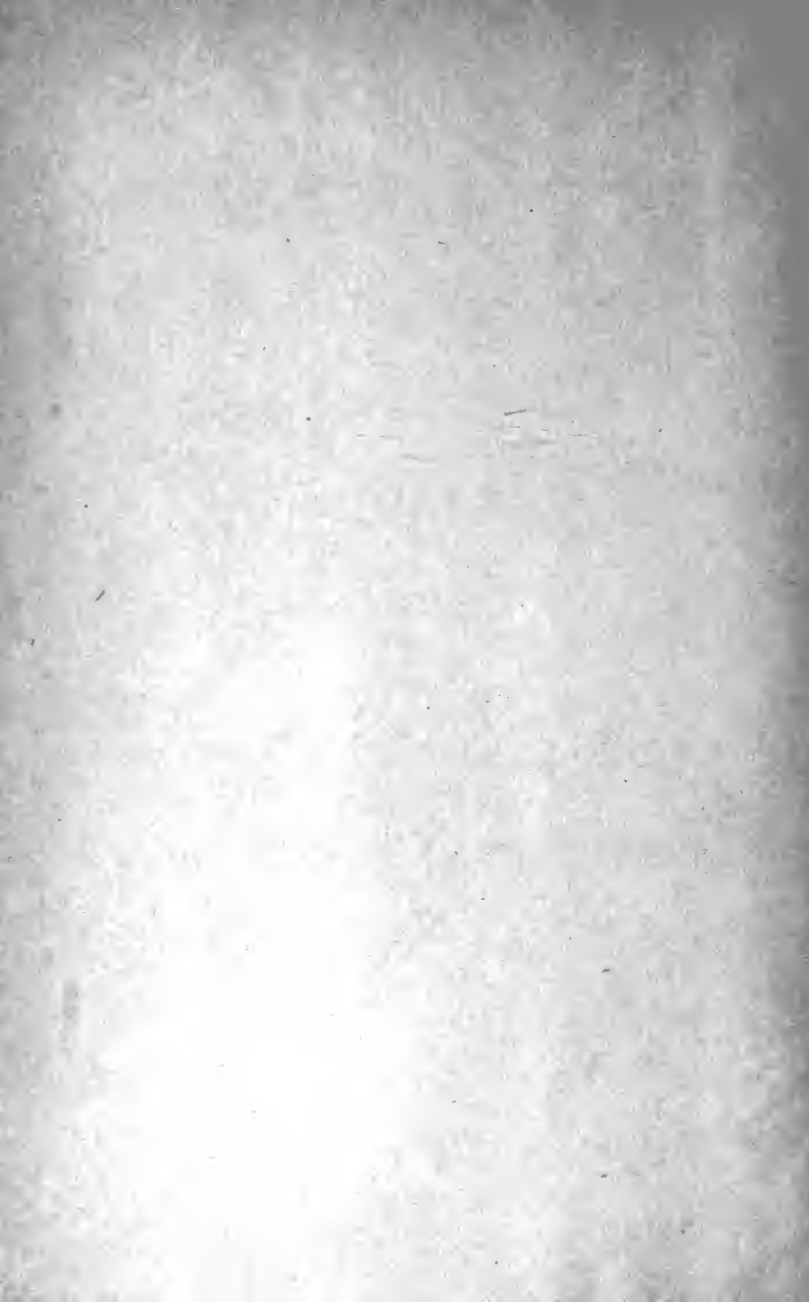
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NORTH CAROLINA
MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

—EDITED BY—

Robert D. Jewett, M.D.

VOLUMES 35 AND 36.

JAN. TO DEC. 1895.

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ROBERT D. JEWETT, M.D., PUBLISHER,
WILMINGTON, N. C.,

1895.

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NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, JANUARY 5, 1895.

No. 1.

Original Communications.

THE PRESENT STATUS OF THE SPECIFIC TREATMENT OF DIPHTHERIA.*

By Professor EDWIN KLEBS, M.D., in Asheville, N. C., formerly of the University of Zurich.

Upon my recent arrival in this country, I found the greatest interest manifest, both in professional circles and by the laity, on the subject of Diphtheria, and the greatest expectations seem to prevail on all sides from Behring's diphtheria antitoxines, as a practically unfailing remedy for the rapid cure of the disease in question.

The reliable information which has reached the profession in this country from Germany being comparatively meagre, and coming, as I did, directly from there, and having through previous and more recent labors been intimately connected with, and interested in, the subject, I was naturally interrogated on all sides as to my views, and especially so by Dr. Shrady, the

editor of *The New York Medical Record*, upon whose request I am pleased to state them herewith for publication.

The use of pathogenic bacteria for the production of curative remedies may be approached in two directions, and for two purposes—first, by using their own secretion products against them for their destruction, the possibility of which is apparent in the dying out of artificial cultures long before the nutrient material is exhausted; and second, we can use these organisms for the production of immunity by their direct introduction into the blood of the animal.

In the first instance, we will have to produce the curative remedy from the culture fluids, in the second from the fluids of animals in whom artificial immunity has been produced.

*Read before the Buncombe County Medical Society.

The question is, which is the surest and easiest method?

The degree of immunity differs materially in the various diseases due to specific disease germs. It is, for instance, very long and lasting in variola, very small and of short duration in diphtheria and entirely wanting in pneumonia.

The second method adopted by Behring, to use the serum of animals in which immunity has been produced, can therefore only be followed for the cure of diseases which secure at least a moderated degree of immunity to persons having recovered from them, and if we accept the results of experiments upon Guinea pigs as applying also to man, diphtheria belongs to this class. In this connection, the clinical experience must not be overlooked that man may acquire diphtheria again after a short period from the time at which all evidence of the previous disease had entirely disappeared. I have lately been able to report several such cases* while the presence for some time of virulent diphtheria bacilli, especially in the nose, after recovery from the disease, without the production of membranes or of general symptoms, speaks, nevertheless, for the production of at least temporary immunity in man also.

However this may be, Behring certainly is entitled to credit for having shown that a great degree of immunity from diphtheria can be obtained in animals by the injection of increasing large quantities of virulent diphtheria cultures into their blood.

According to the results obtained in Europe, the serum from such animals

has certainly a high degree of curative properties, since by its subcutaneous injections all fresh and light cases have been uniformly cured, and the best reports of all cases, severe and light (including tracheotomy cases), have reached as high as 88 per cent. of recoveries.

Some observers, as, for instance, Hahn, of the Friedrichshain Hospital, in Berlin, have expressed themselves more doubtful as to their experience, and it is probable that the variability in degree of individual cases caused the difference in results obtained, however, upon these less favorable reports the injected quantities were increased to 100 c.c. (a little over 3 fluid ounces) especially by Ehrlich, and apparently with good results.

To come to an understanding, two questions will have to be answered:

1. Are there no dangers connected with the use of Behring's serum?
2. Cannot the same results be obtained in an easier and safer way?

As to the first question, the exponents of the serum treatment accept it as a settled fact, that no harm can come from its use; so far as their experiments upon animals show, they are entitled to this belief; but that it is also true as to man, can by no means be accepted as proven. If we will only remember that the very small quantity of organic matter which is inoculated in vaccination against small-pox has undoubtedly been the means of transmission of human diseases, especially syphilis and tuberculosis, and, without in the remotest affiliating with the opponents to vaccination, who, on account of occasional harm, would throw away the valuable and life-saving discovery of Jenner, I recog-

*Wiener Med. Wochenschrift, Vols. 31-38, 1894.

nize, nevertheless, the danger which experience showed to exist, and I believe that, by abandoning human vaccine matter for animal lymph, the profession took an important step for the prevention of incidental infection. But even bovine vaccine matter is not absolutely safe, since we have no guarantee of the absolutely perfect health of the animal; for instance, calves are frequently found to suffer from tuberculosis without recognizable symptoms, and nothing short of the killing of the calves and painstaking autopsies, as I inaugurated in Austria, before the vaccine matter derived from them is used, can be considered as having met all the precautions necessary, and to which persons, especially under compulsory vaccination, would seem to be entitled.

If, however, such precautions become a duty in vaccination where only the minutest quantity of organic matter is inoculated, how much more is it necessary to look to the absolutely perfect health of animals from which we derive serum for the treatment of disease and of which it is proposed to inject 100 cubic centimetres for the cure of diphtheria?

It is, indeed, well known that in the horse, which is especially made use of for obtaining the serum, there may exist latent diseases of an infectious character, for instance, a chronic form of glanders may be confined for a long time to the cavities of the head and nose without occasioning any discharge whatever,, and with but little or no glandular swelling at all, but which, nevertheless, may be a source for fatal infection. Only the most careful post-mortem examinations can guard us against the occasional use of appa-

rently healthy, but, nevertheless, diseased animals, and the killing and examination of the animals is necessary before their serum is used for therapeutic purposes. Nothing has, as yet, been said or published on this aspect of the serum treatment, but it should not be ignored because of the value of the animal and the long time necessary before they have been brought to a state of sufficient immunity, and since it is only a question of money, the state should step in and take the matter under its supervision and control.

The exponents and followers of the serum treatment will naturally reply that so far no harm has followed its application. It is, however, not at all shown that this danger has been sufficiently appreciated. Of the severer cases, 29 to 30 per cent. have terminated fatally after applying the treatment, and who can maintain that all the fatal cases were really due to the disease?

I willingly admit that the dangers spoken of may also be diminished to a smaller degree by the painstaking selection of animals, but under all circumstances the obtaining of serum for therapeutic purposes will ever be a very costly method.

This leads us to the second question, Can we obtain a bacterial curative substance for diphtheria in an easier manner, which is safer and cheaper, while equally effective?

I have for a long time followed the thought that pathogenic bacteria, the same as all other living organisms, secrete substances which are poisonous to themselves, of which the retention of excrementitious substances from the kidney and liver of man is a familiar

instance. In the case of pathogenic bacteria this is also manifest, from the fact that artificial cultures die out long before they have exhausted the nutrient substances in their culture media.

This principle governed me in the use of tuberculocidin and antiphthisin for the cure of tuberculosis, and also of antidiphtherine, which latter I have proposed for the cure of diphtheria.

That this principle is correct becomes further evident from a number of quantitative experiments made by me with tubercle bacilli. In the beginning of July of this year I prepared three liter cultures containing 500 cubic centimetres, each of old and new culture fluid of sterilized glycerine-pepton and meat extract. On July 14th I inoculated each with an equal quantity of tubercle bacilli from the same source. The results on August 22 were as follows :

Culture No. 1 contained only old culture fluids; in this culture the tubercle bacilli had grown but little, did not cover the surface, and their weight, after being dried at 28° to 30° centigrade, was only 0.046 gramm.

Culture No. 2 contained 300 c.c. old and 200 cubic centimetres new culture fluid, the tubercle bacilli had grown better, covered the surface more, but only in a very thin layer, without attachment to the side of the flask; their weight, determined in the same manner, was 0.443 gramm.

Culture No. 3 contained 200 c.c. old and 300 c.c. new culture fluid; the color approached more to a normal one, covered the entire surface, and in a few points attached itself to the side of the flask; their weight, determined in the same manner, was 2.586 gramm.

The latter is about half or slightly over the weight of the tubercle bacilli

from a normal culture of equal size and kind.

These experiments show that considerable quantities of toxins must be formed before the growth of the pathogenic germs is entirely prevented—only upon entirely ripe cultures is their growth impossible—but these experiments show further, that the growths have by no means reached the weight which would correspond with the new culture fluid which was added to the old.

If we take round figures, 500 c.c. of new culture fluid should furnish in a certain time 5 grammes dried tubercle bacilli, 300 cubic centimetres, 3 grammes and 200 c.c. 2 grammes. The experiments show, however, that the weights fall short in all. In No. 1 of exclusively old culture fluid only the one-hundredth part was obtained, in No. 2, instead of 3 grammes, I obtained only 0.45 gramm., in No. 3, instead of 3 grammes, only 2.5 gramm., showing that the presence of toxins in the old culture fluids exert a damaging influence upon growing tubercle bacilli.

Quite similar have been experiments with cultures of other pathogenic germs, and we can accept as a law, that the diminished growth and the dying out of bacteria depend upon accumulation of their secretions. The latter substances, which belong partly to the albumen group, are partially toxic, and I distinguish, therefore, soz-albumen and tox-albumen, which must be separated from each other.

The soz-albumen from tubercle bacilli is represented in antiphthisin and in diphtheria bacilli cultures in antidiphtherine. The cost of production of the latter depends entirely upon the facilities for large or small cultures,

and it will be my endeavor to produce it so cheaply that it will be within the reach of the poorest family in the land, as soon as I shall have demonstrated its clinical value. To this end, I expect the arrival of a large shipment from my laboratory in Strassburg about the first of the year, and it is my purpose to furnish the remedy free of all cost for the purpose of making comparative trials of its value with that of the serum of Behring. For present comparison, I have at my disposal a series of 51 cases treated by various physicians in Germany with antidiphtherine. Of these 51 cases, 7, or 13.7 per cent. died, and 44, or 86.27 per cent. recovered; they include both light and severe cases, and such where tracheotomy was required.

A similar series of cases under serum treatment shows 13.3 per cent. of mortality, and 86.7 per cent. of recoveries. The small difference may depend upon the greater number of tracheotomies in my cases. As to the results in the latter, alone, I have 5 deaths in 12 cases, or a mortality of 27.7 per cent., which is as favorable as under the serum treatment.

I have, thus far, applied the antidiphtherine only locally, believing that the process is a local one in the beginning. My investigations have shown me that the diphtheria bacillus is chiefly found in the superficial layers of diphtheritic membrane, and as the latter becomes older in the advancing edges of its formation, the bacillus may there be demonstrated, when none will be found in the central portions.

The application of antidiphtherine has been free from all unfavorable effects whatever, and upon its early and thorough local use depend its

prompt and curative effects. Upon a suitable cotton-wrapped probe the remedy is applied upon the diphtheritic patch, the latter having first been cleansed with dry cotton, gently pressing and rubbing the soaked cotton upon the diphtheritic and suspected patches, and leaving it in contact as long as the patient can comfortably hold. We repeat this two or three times, and thereafter swab out the entire pharynx and fauces with the remedy; great gentleness and at the same time thoroughness are essential, especially with very young children; in the latter we may, however, touch the greater part of the fauces and pharynx with the cotton, at one time, holding the latter in a pincette with which we may also pass upward behind the velum and naso-pharynx if we suspect trouble there. If none of the patches have been omitted the temperature falls in the course of three to five hours and a sense of well-being returns; if the fever does not subside, the application must be repeated and new patches be looked for; in their absence the application must be made in the nose and naso-pharynx also, where patches may be hidden from recognition.

A new rise of temperature indicates a new development either upon the old or a new focus, and the applications must thus be repeated more or less frequently, according to the course the cases pursue.

Under the most favorable course two or three applications should be made daily until all evidence in the throat has disappeared. The membrane soon loosens and is cast off, leaving a smooth, shining surface covered with epithelium, a very important result, as thus streptococci infec-

tion is prevented. The remedy may also be used subcutaneously or per rectum, especially in severe or older cases. Beginning with 1-10 of a cubic centimetre, we reach 1 cubic centimetre in nine hours, after which the same quantity is repeated two or three times a day or still increased if necessary.

Animals bear the subcutaneous use without any unfavorable effect. For the present, in the human subject, I recommend that the action of the human heart be carefully observed during the systematic use of this preparation.

Winyah Sanitarium, N. C., 1894.

THE DIAGNOSIS OF SYPHILIS OF THE NERVOUS SYSTEM.

By W. B. PRITCHARD, M.D., Adjunct Professor Mental and Nervous Diseases
New York Polyclinic.

No affection of the nervous system is so protean in its symptomatic manifestations as syphilis. Epilepsy, locomotor ataxia, meningitis, tumor, myelitis and encephalitis, neuritis and various paralyses due to thrombosis and endarteritis are among the organic conditions of disease which quite often have their sole origin in syphilis. The various sclerosis may be due to this cause. Among mental diseases, general paralysis of the insane is a type well known as standing in the relation of effect from this cause in association or not with other factors, while I have seen symptomatic mania and melancholia, especially the former, dependent upon syphilis as demonstrated by the history and the quickly curative action of antisiphilitic remedies. Dementia is a well-known terminal stage of many forms of cerebral syphilis. In the realm of functional diseases of the nervous system hysteria itself cannot produce a broader or more varied symptom picture. Pseudo-chorea, tremors of all types, cephalalgia, insomnia and various other neuroses, have been again and again demonstrated as being due to either the pri-

mary toxic agency of this disease or to some secondary nutritive change which resulted from it. With such a kaleidesopic field of action—a symptom picture so varied—it might be inferred that the determination of syphilis as a cause in any given case, would be difficult, and yet the facts, upon analysis, demonstrate, to my satisfaction, at least, that quite the opposite is true. Nothing in neurology is easier, in the majority of cases, than the recognition of syphilitic types of nervous disease in the adult. That this is a most fortunate fact, is evident in the clearer indication afforded for treatment and the relatively far better prognosis in the majority of instances. An admitted history of infection is not always reliable. Certain forms of nervous disease may coexist with syphilis in an individual without any relationship of cause and effect. It is easy for a layman to be in doubt as to whether a given local lesion was true chancre or innocuous. A denial of syphilis should never be considered unless absolutely consistent with symptomatic facts, and this applies especially to married women and cases of

suspected heredity. The fact that syphilitic forms of nervous disease are comparatively easy of recognition, is of no value unless you are able to identify a given case with absolute independence, so far as the patient's admissions are concerned. I believe this can be done with comparative ease in most cases, especially in adults. In children, in whom we meet only the inherited disease, the diagnostic data are different in some important respects—some of much value are often absent, while others are present which are rather peculiar to the inherited disease. I do not recall a single symptom which is diagnostic or of much value alone. It is by the association of several symptoms only that we can determine that a given case is of syphilitic origin. The symptomatic data upon which such diagnosis can be made are as follows :

Headache.—This I have found present in some degree in 44 out of 50 cases. In many it was violent, even to the production of delirium, in others dull. In a few cases it was continuous for weeks. In the majority of cases it was absent entirely during the forenoon, coming on towards evening and growing worse as the night advanced. In a larger proportion of cases the pain was in the back of the head, though the location is not constant or diagnostic. In four cases there was tenderness on percussion of the skull, and in one case this tenderness corresponded to the probable location of a gumma or node. These headaches, in cases followed by paralysis, due to cerebral disease, always disappeared upon the onset of paralysis. In several instances they reappeared after a time, always interpreted by me as a danger-

signal, indicating a renewal of hostilities on the part of the enemy.

Disturbances of Sleep.—A tendency to somnolence I have found characteristic of late cerebral syphilis, associated very often with progressive dementia. In the early stages of syphilitic diseases of the nervous system insomnia is far more common. As a matter of fact, I have never seen somnolence in the early disease except in association with acute symptoms, as in the pseudo or actual apoplexies, and it is not then diagnostic. The insomnia is associated with the headache almost invariably, and is peculiar in that it occurs during the forepart of the night, the patient lying awake until 4 or 5 o'clock in the morning. In a few cases slight wandering delirium or hallucinations may be present. The insomnia of melancholia simplex is just the reverse, occurring in the second half of the night. Syphilitic insomnia, as a rule, is absolute while it lasts. The insomnia of neurasthenia consists of alternations of sleeping and waking throughout the night, leaving the patient tired and unrefreshed in the morning, while the two or three morning hours of sleep obtained by the syphilitic, enable him to meet the beginning of the day with comparative vigor. As with the headaches, so the insomnia may leave abruptly upon the onset of an explosive seizure, as in hemiplegia. Its return possesses the same warning significance.

Vertigo.—This is usually of a simple type, and is present in association with the headaches, not occurring, as a rule, in the intervals when the headache is absent. The vertigo may at times pass into momentary unconsciousness. This occurred in one of

my cases at a time of great mental excitement, and in another case from exposure to intense heat.

General Weakness, Mental and Physical.—I have been struck with the constancy with which patients affected with nervous syphilis complain of a general muscular weakness, a malaise which may be totally inconsistent with the appearance of the individual. They show an indisposition for exertion in any direction, a sluggish physical and mental state which is out of proportion to the complaint made or to the general appearance. Occurring with the headaches and insomnia described, with the vertigo, and followed by paralysis, this condition becomes one, in my mind, of much diagnostic importance.

Tremors.—Localized or general tremors were present in 28 of the 50 cases which furnish the statistical data for this paper. They were most often of the hands on extension, next of the tongue, sometimes general, corresponding in many cases to the location of the disease. Usually the tremor was greatest during the period of greatest intensification of the headache. When the tremor was limited to one limb it was almost invariably a precursor of paralysis in that limb.

Distribution of Paralysis.—It is exceptionally the case that paralysis resulting from syphilis follows a classical or standard type. The distribution is often erratic, sometimes bizarre, nearly always indicating the presence of more than one focus of disease. As is well known, the ocular muscles are especially prone to involvement. The third nerve is so often attacked that a ptosis or external strabismus occurring in an adult suddenly, sug-

gests syphilis as a cause at once. A striking feature in paralysis affecting the limbs, due to syphilis of the brain, is the gradual onset observed in many cases, preceded by attacks of different forms of paresthesiæ and with tremors. The paralysis may be transient, appearing and disappearing several times before becoming permanent. The same phenomena may be observed in paralysis due to tumor, which is not specific, though in such cases the paralysis remits rather than intermits, as in syphilis.

To summarize, briefly, these various diagnostic symptoms in syphilis of the nervous system, we have headaches, characterized by nocturnal exacerbations; associated with insomnia, present during the first half of the night; vertigo with the headaches, sometimes amounting to transient unconsciousness; tremors paresthesiæ and weakness, often affecting a limb which is afterwards paralyzed; a general condition of profound subjective physical weakness and mental sluggishness, with finally paralysis of one or several muscles erratic in distribution, usually of gradual onset, varying in degree from day to day, the headaches and insomnia disappearing, as a rule, immediately upon the onset of paralysis. This combination of symptoms occurring in an adult is as nearly positive evidence of syphilis as a cause as is any axiom in medicine. Should there be in addition an admitted history of infection or concomitant lesions in the skin, bones or viscera, the diagnosis is absolute. The therapeutic test is of value—great value—but it is not absolute. I have seen cases of non-specific tumor and of tubercular meningitis very greatly improve tempora-

rily while taking mercury or iodide of potassium. It is scarcely necessary to emphasize the necessity for exclusion in making a diagnosis of syphilitic disease of the nervous system. The diagnostic data enumerated are applicable to all forms of central specific disease of the nervous system, both cerebral and spinal, though less constant in the spinal cases. Syphilitic disease of the peripheral nerves alone is rarely observed. The explanation, to my mind, of the fact that these symptoms are common to both cerebral and spinal syphilis lies in the belief that we do not meet with disease of either brain or cord alone, but that in all cases both are involved, though in varying degree, of course. Producing disease of the nervous system, as it does, through the medium of the blood-vessels, syphilis is never limited to a circumscribed area, and this is true even where a post-mortem reveals by gross examination only a single gumma. I have seen headache and insomnia with vertigo precede for several weeks a paraplegia due to a specific meningo-myelitis, not associated with any focal cerebral symptoms whatever. I have found these same symptoms present in the early histories of 4 cases of locomotor ataxia, and I do not believe that syphilis can produce symptoms of organic disease of either brain or cord alone, but that in all cases both are more or less involved, usually through the blood-vessels supplying the meninges primarily.

The following cases afford examples of the value of these diagnostic data in several varieties of both cerebral and spinal syphilis. They also demonstrate the extraordinary value of the only rational and successful method of

treatment, that of iodide of potassium in doses only limited by the resistance of the disease.

Case 1.—H. L., Swede, age 37; proprietor of saloon and sailor's boarding house. Was called to patient at night in consultation. He had been ill, though not confined continuously to bed, for five weeks.

The physicians who had been in attendance had variously diagnosed the case as malaria, Bright's disease and softening of the brain. Patient was in bed and did not notice my entrance, although a stranger. He was awake, but seemed in a doze, and would reply to questions slowly, if at all, and often incorrectly. His cerebral reflexes were, in fact, so dulled as to suggest dementia. He was very weak, unable to hold his head up from the pillow. I found no actual paralysis, though muscular action was everywhere weak, and tactile pain sense seemed dulled generally. He passed urine and feces unconsciously. It was useless to question him, but from his wife, an intelligent Swedish woman, I learned the following facts: Three or four months previously he had complained much of headaches, especially if in the sun or a hot room. The headaches at first came irregularly, but after a time they occurred only in the evening, and he felt worse in every respect in the evening, being able to attend to his duties only during the forenoon. A few weeks after the headaches began he began to suffer from insomnia, at times getting no sleep at all until 5 or 6 o'clock a. m., when he would doze for an hour or two. One night he became very much excited and nervous and threatened to kill himself. He grew weaker gradually

from day to day, and finally was confined to his room and much of the time to his bed, all the symptoms persisting and a state of mental sluggishness developing in addition. Upon these facts I made a diagnosis of cerebral syphilis, probably diffuse endarteritis, and put the patient at once upon 25-drop doses, three times daily, of a saturated solution of iodide potassium. This was increased 10 drops daily until the patient reached the dose of 185 drops, or about 165 grs., three times daily, or a little more than an ounce of the iodide a day. He made a perfect recovery, and has had no relapse during the two years which have since elapsed. I did not ask this patient as to syphilitic infection until recovery was well advanced. He admitted syphilitic buboes.

Case 2.—H. W. J., age 21. Private patient. Youngest of four children, all living and healthy. Contracted syphilis at age of 17. For six months or more he has suffered from severe headaches, always worse towards night. As he spent his nights usually gambling or in other dissipations, insomnia was not easy to establish. He often found himself, however, unable to sleep in the day following a night out, and stated that he averaged much less sleep than formerly. The headache was always worse over the right temporal region, and was associated with frequent attacks of vertigo, often causing him to grasp surrounding objects for support. He was very nervous and tremulous at times, being unable to command his hand in writing. He complained much of general weakness, and had occasional attacks of numbness in the right arm and face, which would continue until he had

taken two or three drinks of whiskey or brandy. July 1st, while standing in a drug store, where he had gone to get something to relieve his headache and vertigo, he suddenly fell to the floor, but did not lose consciousness, and in a few moments was able to get up and walk home with assistance. The entire left side was affected with a decided hemiparesis. In half an hour he was all right, and went down town alone, but was brought home in a cab, a few hours later, partially paralyzed as before. Next morning the hemiplegia was completed, and he lay in bed a week. He got better gradually, and three weeks later there was scarcely any evidence of the paralysis. August 12th he had another attack, also without unconsciousness, but with a resulting hemiplegia which was complete, but of the right side and with marked though incomplete motor aphasia. Under iodide of potassium, carried up to 600 grs. daily, he improved and would have made a perfect recovery but for his incessant and extreme dissipations and excesses. He did make, subsequently, a good recovery under the same treatment in the hospital of a penal institution to which he was committed as a criminal. His disease, probably multiple meningeal gummata, caused a mental perversion which was extremely interesting from a medico-legal standpoint. While retaining his intelligence, and, indeed, seeming to have developed unusual shrewdness, he became a moral pervert without sense of shame, a liar and a thief. He was twice arrested for selling hired bicycles and for stealing and selling a horse and wagon he had hired for a drive, and again arrested under very suspicious

circumstances, in connection with a most daring robbery.

Case 3.—Peter P., sailor and hotel-keeper, age 38. Was seen by me on September 10th, 1893. Always in good health until a few months previously, when he began to suffer from general weakness and occasional vertigo. He became mentally nervous, somewhat irritated and restless.

Occasionally he had severe headaches of a dull character, almost always during the latter half of the day or at night. He claimed never to have suffered from insomnia, but as he kept an all-night hotel and saloon, this fact may have some bearing upon its absence. His general weakness and debility caused him to take a trip abroad with the hope of benefit. He sailed for New York in August.

Twice during that month, while abroad, he had seven attacks of vertigo. While on board ship, immediately following exposure on deck after a hot bath, he felt a sudden dead numbness in the legs from the hips down, which became quite weak, especially in going up and down stairs. His gait became shuffling and unsteady, bowels constipated, urine dribbled and sexual power much impaired, though not lost. He also complained of a band-like feeling at about the waist-line (cincture symptom). Physical examination showed a decided paraparesis most marked in the right leg, exaggerated knee-jerks, ankle-clonus, marked Romberg and ataxia of locomotion. Tactile and pain-sense both much impaired, being almost completely abolished in the right leg, on dorsum of foot and anterior thigh. Temperature and muscular sense also impaired, though in less degree. The motor paralysis was

greatest in the flexors, and the right leg showed slight atrophy, but without electrical change. I made a diagnosis of syphilitic meningo-myelitis. He admitted syphilis in 1883, contracted in China, for which he was treated by a ship's captain less than six months. Under spinal galvanism and peripheral faradism and potassium iodide, carried up to 260 grs. three times daily, this man made an excellent recovery and has been busily engaged as captain of a fishing schooner for the past four months.

Case 4.—Mrs. L. C., age 40. Patient treated at my clinic. Has borne four living children, two dying in infancy. Has had two miscarriages. Both living children are cachectic. Patient always well until September, 1889, when she began to suffer from pain in right lower jaw. She had never had facial pain or neuralgia before, though for several weeks she had been having headaches, with nocturnal exacerbations, associated with insomnia and vertigo. Several teeth were extracted, but with no relief, the pain rather increasing and gradually involving the entire right side of the face. About five weeks after its onset, the pain suddenly left and simultaneously the right face was found to be paralyzed and anesthetic. All the branches of the 5th and 7th nerves were paralyzed, and a few months later she lost vision in the right eye through a neuro-trophic paralytic ophthalmia. No other cranial nerve was affected, nor were the extremities affected. This woman did not know that she had ever had syphilis, or that her husband, who had been dead some years, had ever had the disease, but the history of two miscarriages, two children dead in infancy from marasmus and two living, show-

ing a cachectic scrofula appearance with a paralysis preceded for several weeks by nocturnal headaches, insomnia and vertigo, in conjunction with the curious clinical fact that most cases of 5th nerve paralysis which are not traumatic are due to syphilis, led me to make a diagnosis of a specific lesion

at the region of the Casserian ganglion. The diagnosis was largely confirmed by the results of treatment, 250 grains daily of kali iodide, causing the paralysis to disappear quite markedly, though vision was not, of course, at all benefited.

347 W. 58th St., New York City.

SUCCESSFUL TREATMENT OF A CASE OF RATTLESNKE BITE.

BY E. G. GOODMAN, M.D., El Paso, N. C.

On the 1st of May, 1894, David Grange, a mulatto, aged about 25 years, was bitten by a large rattlesnake on the radial side of the right hand, over the interspace between the first and second metacarpal bones. The entrance of the snake's teeth caused punctures large enough to admit a small straw to the depth of a half inch.

When first seen by me, about two hours after the accident, the patient's tongue was swollen until articulation was indistinct; the radial pulse was weak and thready, and soon ceased to be felt entirely.

One of the first symptoms noted by the patient was a green appearance of every object, which symptom was experienced in a few seconds after being bitten, and, so far as I can learn, this green vision is a constant symptom of snake-bite as soon as the poison is carried by the circulation to the brain.

My first treatment was to relieve the intolerable pain by the use of morphine, and to rouse the flagging circulation by the use of ammonia, strychnine and atropine. I also applied stronger water of ammonia and strong acids to the wound; but this was mere

formality, as the poison had long passed beyond the reach of local remedies.

Knowing from the results of the dissecting room, that arsenious acid has the power to neutralize, to a great extent, the poison of a dead animal fluid when a cadaver is well injected with its solution, it seemed rational to conclude that it would possess the same power to neutralize the poison of a living animal fluid.

With this purpose in view I gave 10 drops of Fowler's solution, and ordered 5 drops of the same to be given every two hours day and night.

When I saw the patient the next day, the arm was frightfully swollen; large livid spots extending along the course of the lymphatics; many large blebs, measuring from one to two inches in diameter, would form in a few hours, and when the fluid was evacuated there would be left a jelly-like mass projecting above the surrounding surface. The swelling extended to the neck to such a degree as to render swallowing difficult. There was intense pain, also much nausea and vomiting. A hypodermic of morphine and atropine relieved both of these symptoms.

I then ordered the solution of arsenic to be increased to 10 drops every two hours, and continued till my return. When I saw the patient the next day, there was some improvement in the constitutional symptoms, but the appearance of the hand and arm is not easily described.

The amount of arsenic that had been taken in the previous forty-eight hours had not caused the slightest symptom of arsenical poisoning.]

With the appearance of improvement I began a gradual reduction in the amount of arsenic, which, however, was continued several days before being suspended entirely.

There was considerable sloughing of the hand, especially about the place of insertion of the poison.

The local treatment consists in cleaning the parts with boric acid solution and the application of carbolized oil.

After the space of two months the patient could use his hand to some extent; and after four months the hand was nearly normal in appearance, except a depression at the place where the poison entered and sloughing was greatest. When the patient was last seen by me there was some stiffness of the fingers and loss of sensation on the dorsal surface of the thumb, index and middle fingers.

Society Reports.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Seventh Annual Meeting, held in Charleston, S. C., November 13, 14 and 15, 1894.

[By our Special Reporter.]

FIRST DAY—MORNING SESSION.

The Association met in Artillery Hall, and was called to order at 10 a. m. by the President, Dr. C. Kollock, of Cheraw, S. C.

Prayer was offered by the Rev. Dr. Campbell, of Charleston.

An Address of Welcome was delivered by the Mayor of Charleston.

Dr. Brodie, of Charleston, followed with an Address of Welcome on behalf of the local profession, and President Kollock responded in behalf of the Association.

Dr. Wm. E. Parker, of New Orleans,

read a Memorial Address on Dr. Warren Stone, which was prepared by the late Dr. A. B. Miles, of New Orleans.

He said as Professor of Surgery in the University of Louisiana for thirty-six years, as Surgeon to the Charity Hospital for thirty-nine years, and as general practitioner from 1832 to 1872, whose experience covered 18 epidemics of yellow fever and cholera in New Orleans, the name of Warren Stone is impressed indelibly upon the local history of a remarkable period. In his surgical clinics he taught the advanced surgery of the Old School. He taught

the principles of drainage in suppurative arthritis, in hepatic abscesses and in pyothorax. He advocated resection of the ribs to facilitate the drainage in suppurative pleuritis. Whether in operative work or in the liberation of pus, he made free incisions. He was among the first in the cure of aneurism of the vertebral artery. In the surgery of the arteries he was an expert. During fourteen years of his work at the Charity Hospital he operated without an anesthetic. Realizing the difficulties under which he labored, he was ready to welcome the new era in surgery then about to dawn. The lives of many men are mirrored in their books and published papers, but the writings of Dr. Stone give but meagre knowledge of his work or his position as an authority on surgery in the South. No man in the profession of Louisiana was ever so universally beloved as Dr. Stone. In his relations with other physicians he was gentle and considerate, never intrusive or aggressive. Many of the physicians in Louisiana to-day who knew him in life speak of him affectionately as "Old Stone," and always with some expression of endearment and respect.

His position in New Orleans may be compared with that of Physick in Philadelphia, Mott in New York, Lister in London, and Velpeau in Paris.

Dr. J. B. S. Holmes, of Atlanta, read a paper entitled *Gonorrhœa in Women*.

He said there was no disease that affected women that should engage the serious and thoughtful consideration of the physician more than gonorrhœa. The author then, after quoting Tait and Sinclair on gonorrhœa, said he had no doubt but that many of the

chronic diseases of the ovaries and tubes that came under the observation of gynecologists were due to that disease. In the majority of cases the poor woman was ignorant of the fact that she had had or has any specific disease. Indeed; her husband might tell the physician that months, or even years before his marriage, he was a subject of gonorrhœa, which was cured and had since shown no evidence of a return.

The essayist could conceive of nothing more dangerous than curetting the uterus in the presence of immense pus-tubes with pelvic adhesions. The drawing down of the organ necessary for curettage may break up pelvic adhesions and pour out the contents of pus sacs into the peritoneal cavity, which would result, in the majority of cases, in death to the woman. If her life is saved at all, it will only be done by a prompt abdominal section, with thorough irrigation and drainage of the abdomen. Then why not, in the first instance, when pus is detected, promptly remove it by surgical interference. We then treat the woman rationally and give her the very best and only chance of relief and restoration to health.

Dr. George J. Engelmann, of St. Louis, called attention to the importance of differentiating between latent or chronic gonorrhœa and the acute form of the disease. He does not look upon acute gonorrhœa as a dangerous disease in women, but he does the latent or chronic form. He has not seen serious results from the acute form, but it is the infection which is not observed from a supposedly cured gonorrhœa in the male which produces the suffering in women.

Dr. Bedford Brown, of Alexandria, Va., took exception to the statement made by Dr. Engelmann in regard to the non-danger of acute gonorrhœa in females, and cited the case of a female in which acute gonorrhœa ran its course, terminating finally in fatal nephritis. In this case there was first urethritis, then cystitis, ureteritis, pyelitis and acute nephritis.

Dr. Richard Douglas, of Nashville, thought Dr. Engelmann had sounded the keynote, in that there is quite a difference in the infection from acute gonorrhœa and the latent form of the disease. Infection from the latter was a mixed infection, not only with the gonococcus, but with the streptococcus and staphylococcus also, and that accounts somewhat for the virulence of the trouble. That gonorrhœa is the cause of uterine fibroids, he could scarcely accept, although he thought Dr. Price was the author of that idea.

Dr. Joseph Taber Johnson, of Washington, D. C., said in the treatment of pus tubes the result of gonorrhœal infection, the very radical suggestion of Dr. Holmes was correct, viz: to resort to abdominal section, as he was satisfied that gonorrhœal pus tubes were incurable by conservative measures. In addition to the removal of pus tubes, if present on both sides, the uterus should be removed also, because it is through the infected mucous membranes of the uterus that the tubes themselves have become infected.

Dr. Wm. P. Nicolson, of Atlanta, said the general surgeon was concerned in the treatment of gonorrhœa as well as the specialist. We are told that the urethra has been inflamed and subsequently restored to its normal condition, and yet years afterwards the man

transmits gonorrhœa to his wife. It is hard for him to accept such a doctrine. If a man goes for months and years with a gonorrhœa absolutely producing no effect whatever, if he is not well, how are we to tell him that he is not? We are told by the essayist that gonorrhœa is contracted by the female when there is absolutely no evidence whatever of disturbance in the urethra of the male, and that there is no trouble by which he can propagate disease.

Dr. A. M. Cartledge, of Louisville, thought the essayist failed to differentiate between cases of subacute and chronic salpingitis and the cases of acute infection from gonorrhœa. He threw out the suggestion that physicians were not fully conscious of the great prevalence of artificial abortions in young married women of the better as well as lower class, and he believes that in these cases of secondary infection from pathogenic organisms we have a more fertile source for the development of tubular and ovarian disease than from gonorrhœa.

Dr. W. E. B. Davis, of Birmingham, Ala., considered the disease a dangerous one. The views of Tait, however, in regard to gonorrhœa were extreme. We have a frequent cause of tubal disease in the puerperal state, in delivery at term or in premature deliveries, frequently in artificial abortions, brought about by mechanical means. More or less infection occurs after all cases of abortion, but if the patient is in good condition at the time, she will not be materially affected. If we have a soil that is favorable for the development of septic germs, we will get a severe inflammation—a mixed infection.

Dr. W. D. Haggard, of Nashville,

Tenn., desired to place himself on record as opposed to the removal of the uterus and tubes for pyosalpinx as the result of gonorrhœa, believing that by dilatation and judicious curetting patients can be relieved of an endometritis produced by gonorrhœa.

Dr. John D. S. Davis, of Birmingham, Ala., emphasized the importance of using the microscope in connection with gonorrhœa and carefully examining the pus. Experience has demonstrated that the latent effects of gonorrhœa were not always directly due to the gonococcus *per se*, but to a mixed infection; that is, we have an inflammation as a result of the gonococcus, which is fired up by another infection from the streptococcus. When we have a mixed infection, we have as a result pus tubes, suppurative peritonitis, and finally death of the patient, if surgical interference is not resorted to.

Dr. Hunter McGuire, of Richmond, Va., entered a protest against the doctrine that a man can have gonorrhœa and not get well. As for the idea that a man who has had gonorrhœa should not get married, it is preposterous. He had seen thousands of cases get well and remain so.

Dr. Holmes, in closing, said he was aware that many cases of acute gonorrhœa resulted in no secondary trouble, because they were recognized early and cured by judicious treatment. He wished to be understood as not endorsing the views of Dr. Tait, that gonorrhœa in the male was never cured, but he insisted that general practitioners were often too careless in advising patients to get married that have been the subjects of gonorrhœa.

Some Cases of Acute Intestinal Obstruction, with Deductions, was the

title of a paper read by Dr. A. Morgan Cartledge, of Louisville, in which he reported six cases, three of which terminated fatally. The author said that the limited number of operated cases reported in his paper, together with an individual observation of probably as many more not subjected to operation, conform to the accepted belief of the hopeless nature of acute intestinal obstruction unless treated by early laparotomy.

While the author does not contend that we can dispense with opium in the treatment of these cases, certainly where obstruction is in the least suspected we should withhold its use until a diagnosis can be made. Certainly the practice of masking every abdominal condition characterized by pain with opium is far too prevalent, and its practice gains additional calamity as surgery advances in knowledge, which offers relief of these very conditions concealed by the cloak of opium and ignorance.

The practical and cardinal points in avoiding a fatal delay and making an early diagnosis, are to be found in: Sudden abdominal pain; a rapidly accelerating pulse; the vomiting of much more fluid in a given time than is taken by the mouth; the green tinged character of this fluid; the anxious expression of countenance when no opium has been used; the fact that, although enemata may be stained by the contents of the colon, there is no expulsive movement of the bowels and the passage of no gas.

The burning question now is to educate men to know that action, to be successful, must be quick; that timely aid depends upon the man who first sees the case; that when a physician

from any reason suspects that a patient's bowels will not move, he should drop everything else and center all his time and attention upon that patient. He should not waste his gray matter by trying to determine if it be a probable intussusception, volvulus, band, diverticulum or what not—leave that for the operation to determine; it is the most reliable way to find out.

SECOND DAY—MORNING SESSION.

Dr. F. W. McRae, of Atlanta, Ga., read a paper entitled *Hernia of the Diaphragm, with Report of a Case*. The author brought this subject before the Association for consideration, not alone because it offered an inviting field for experiment and investigation, but also because of a recent interesting case where, without warning, he was forced to meet the emergency without time for research into the literature of the subject, and, while he was not then sustained by a knowledge of the opinions of the leading authorities, he finds from subsequent investigation that the course pursued was in accord with the recommendations of such eminent authorities as Laennec, Bowditch, Guthrie and Marcy. In the case reported strangulation had occurred five days prior to the doctor seeing him. Had an early diagnosis been made, the author feels sure the strangulation could have been relieved and the patient's life prolonged. The opening in the diaphragm was accessible, and he believes it could have been closed with a fair chance of permanent recovery. The case serves to emphasize the necessity for early operation in all

cases of acute obstruction of the bowels.

Dr. Louis McLane Tiffany, of Baltimore, read a paper entitled *Gunshot Wound of the Spleen and Kidney; Abdominal Section; Hemostasis by Deep Suture; Recovery*.

The patient was a male negro, 20 years of age. Two hours previous to entering the University Hospital, on March 21st, 1894, he had been shot with a small calibre rifle from a distance of twenty feet, the weapon being directly behind him and he being erect. His urine was slightly albuminous; the pulse, temperature and respiration were normal. There was a bullet wound three inches to the left of the spine, just below the last rib, from which blood oozed. After properly cleansing the wound it was enlarged, and it was found that the kidney had been injured and that a bullet had passed onward, presumptively into the perineal cavity. The wound was filled lightly with gauze by the resident physician, and Dr. Tiffany was notified. External examination of the abdomen by touch and palpation revealed nothing, not even painfulness.

The patient was anesthetized, laid on the belly, and the wound, after being enlarged, was examined. The upper portion of the left kidney was perforated, and dark blood flowed from the peritoneal cavity beyond. This large wound was filled with gauze, the patient turned on the back and the abdomen freely opened along the left semi-lunar line. A moderate amount of blood was free in the peritoneal cavity. No wound of the intestine could be discovered, but the spleen was found perforated, blood flowing freely from the wound of entrance, as

well as from the wound of exit; the latter wound, in the concavity of the organ, was slightly the larger of the two.

The perforation through the spleen was about three inches from the free lower border. Unwilling to subject the patient to splenectomy, the essayist attempted to arrest the bleeding in the following manner: A long needle, threaded with silk, was passed entirely through the spleen central to, and parallel with, the bullet track; the long ligature was then tied over the free border of the organ so as to press the surfaces of the wound together tightly enough to arrest bleeding, yet not to tear through the splenic tissue; the

ends of the ligature were cut short, the peritoneal cavity cleaned by copious irrigation with hot water and the abdominal wound closed. The kidney was tamponned with gauze through the dorsal wound. Convalescence was uneventful. The anterior wound healed by primary union; urine flowed from the dorsal wound for two days only, union by granulation taking place. The patient left the hospital well on April 22d.

In this case, the wound being small, hemorrhage was not profuse, and no abdominal organ save the spleen was wounded.

To be continued

STATED MEETING OF THE BUNCOMBE COUNTY MEDICAL SOCIETY.

Held December 3, 1894.

The Society was called to order at 8 o'clock p. m. by the President, Dr. Burroughs.

The following were elected officers for 1895:

President—Dr. Purefoy.

Vice-President—Dr. McBrayer.

Secretary and Treasurer—Dr. Mil-lander.

Member of Council—The retiring President, Dr. Burroughs.

Dr. von Ruck introduced to the Society Professor Dr. Edwin Klebs, of Germany, whom he had invited to this country for the purpose of obtaining his aid and counsel in the specific treatment of tuberculosis in his Institution, the Winyah Sanitarium.

The paper for the evening being on

Diphtheria and the author declining to read, in order to have the opportunity of hearing Professor Klebs on this subject, the latter was invited by the President to address the Society on Diphtheria, with especial reference to the recently advocated treatment with Antitoxine Serum.

Professor Klebs then requested Dr. von Ruck to read for him a short communication which he had just prepared at the request of Dr. Shrady, for publication in the New York *Medical Record*, and which is published in full in another part of this issue. (See page 1.)

At the conclusion of the address, Professor Klebs said that he should be pleased to answer any question which the members might wish to ask, and

showed photographs of the cultures referred to, from which the diminished growth of pathogenic germs, in the presence of their special toxines, was very apparent.

Dr. Battle then asked Professor Klebs his view as to the disease being primarily a local or constitutional affection?

Professor Klebs: This question was discussed for the last time at the Congress of Genoa, Italy, in the earlier part of the eighties, and just before I demonstrated the diphtheria bacillus as the specific cause of diphtheria. The theory of the constitutional origin of diphtheria came more particularly from the French School, but since the discovery of the specific germ it has been entirely abandoned, even in France, and I am not aware that for some years past such an origin has been entertained by either clinical or scientific authorities.

Dr. Watson related two cases in which no membranes were visible at any time in the throat, and in which the symptoms indicated diphtheria with rapid fatal termination, and he asked if a constitutional origin could not be assumed in such cases?

Dr. von Ruck replied for Professor Klebs that such cases have been observed in a number of instances and that toxines may be produced in large quantities by the specific germs, and the patient may die of severe intoxication, even before membrane formation has occurred. In many such instances, however, diphtheritic membranes were found in the cavities of the nose and naso-pharynx upon post-mortem examination, and their possible presence must not be lost sight of in all cases of diphtheria, with or without the evidence of the disease in the form of

membranes in the visible portions of the throat.

The Society then tendered its vote of appreciation and thanks to Professor Klebs, and adjourned.

THE ANTITOXIN TREATMENT OF DIPHTHERIA.—Borger reports in the *Deutsche Med. Wochenschrift*, November 29th, the results of 30 cases of diphtheria treated with Behring's antitoxin at Griefswald. Of the 30 cases 28, or 93 per cent., recovered. In five of the cases tracheotomy was done, with four recoveries, or 80 per cent. According to Borger, the disease at Griefswald is usually comparatively mild during the autumn season. These cases were under treatment in August, September and October. Kuntz, in the same journal for December 6th, reports 25 cases treated at the Hospital in Oschersleben, with 22 recoveries, or 88 per cent. In two of these tracheotomy was done, and both recovered.—*Boston Med. and Surg. Jour.*

A THIRD FATAL KNOCK-OUT.—A telegram from New Orleans reports the death of a pugilist from the effects of a blow received on the point of the jaw during a sparring contest. The victim did not regain consciousness, and died about ten hours after the accident. As the result of an autopsy the coroner's verdict was that death occurred from concussion, probably due to the head striking the hard floor. This is the third fatal sparring accident reported within four weeks.—*Ibid.*

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NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

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Editorial.

THE NEW YEAR.

Time has marked another circle and another chapter in the history of the world has been completed. As we pass another mile-post on the journey of life, let us not look back to deplore the rough places and the difficulties that have been encountered, and which are now behind us, but gaining wisdom by experience, let us keep our gaze upon the untrodden path before us, and go on with greater determination than ever, believing that the heights that others have scaled we can scale also. We live in a truly favored land, and have much for which to "thank God and take courage." While we have enjoyed peace and bountiful

crops and escaped all dire calamities, some have lost their rulers by the assassin's knife or by death, others have been scourged by pestilential disease, and others still have been plunged into disastrous and cruel war.

We congratulate our readers on the bright prospects for a continuance of these blessings, and extend to them our most hearty good wishes for their happiness and prosperity during the year that has just dawned. But may we all remember that most of a physician's prosperity depends upon other people's misfortunes; so let our satisfaction in our success be tempered with sympathy for those whose sufferings

have brought that success. The doctor who, at the end of the year will have most cause to thank God that he has lived, will not be he who has earned and collected the greatest number of dollars, but he who has used to the best advantage his opportunities for doing good; who has been the most ready to relieve suffering; who has watched as tenderly by the cot of the penniless child as beside the luxurious couch of the influential millionaire; who has taken advantage of the trusting confidence of his patient and pointed him to the path of rectitude; who has administered to the souls as well as to the bodies of his patients, and has done it all from a higher motive than the mere gain of pelf.

As promised in our last issue, the JOURNAL will henceforth be issued twice a month. We have every reason to feel encouraged, and have not the least doubt that the venture will prove eminently successful, and that we will receive the hearty support of the profession in this section of the country. We will use our best endeavor to make the JOURNAL newsy, interesting and profitable, and earnestly solicit the assistance of our friends in accomplishing this. Items of professional news, reports of cases of interest, original scientific papers and condensed reports of society meetings will be gladly received. To our many friends who have sent letters expressive of their good wishes for the future prosperity of the JOURNAL, we extend our earnest thanks, and assure them, one and all, that we will strive faithfully to merit their good opinions and kind encouragement.

MEDICAL LEGISLATION.

We would remind the Committee on Legislation, appointed at the Raleigh meeting, that the General Assembly will soon be in session, and that if nothing is done in the matter of improving the laws for the protection of the public health within the next sixty days, things will have to remain as they are for another two years. The Committee is composed of Dr. A. W. Knox, of Raleigh; Dr. T. S. Burbank, of Wilmington; Dr. Hubert Haywood, of Raleigh; Dr. K. P. Battle, of Raleigh, and Dr. T. D. Haigh, of Fayetteville. There are three important matters in regard to which our State is not in line with the more advanced States: blindness from ophthalmia neonatorum: the regulation of the practice of mid-wives; and restriction on the sale of poisons.

In regard to the prevention of blindness, the State Society, in Conjoint Session with the State Board of Health, at the last meeting of these two bodies, passed the following resolutions:

Resolved, That it is the sense of this Conjoint Session of the State Board of Health and the State Medical Society that legislation tending to lessen blindness from this disease (ophthalmia neonatorum) similar to that already enacted in a number of the other States is desirable.

Resolved, That the Committee on Legislation of the Medical Society be requested to use their best endeavor, if, in their judgment, after the assembling of the Legislature in 1895 it be wise to agitate the subject, to secure the enactment of such a law.

The *personnel* of the Legislature is so completely changed that it will be impossible to forecast what would be the outcome of an attempt to secure the passage of such a bill, but we would ask each of our readers in the State to make a special effort to impress upon the members of both houses from his section the great importance of such a measure; that this disease is the cause of the blindness of more than one hundred persons in our State; that when a child is made totally blind it is almost of necessity a life-long burden upon the State; that the disease in question is manageable if taken in time and treated intelligently, but if left to itself or the tender mercies of the officious mid-wife, with her green tea poultices *et cetera*, is almost sure to destroy the sight of its victim; that the disease, in a large majority of cases, occurs in those in the lower walks of life who strive to avoid the expense of doctors and medicines, and who, if made blind, must be provided for at the public expense.

The registration of mid-wives is a thing the importance of which cannot be denied. It would be necessary for the proper execution of the law for the

prevention of blindness, if for no other reason; but it would be a step in the direction of saving innocent women and babes from the superstition and ignorance which are about the only qualifications of the women who compose this class at present. While it may not be possible to effect so radical a change immediately as would be desirable, these women should be required to exhibit some information on the subject of obstetrics, and should all be able to read and write. This, if nothing more.

The sale of pure, well-known poisons and of patent medicines containing them by druggists and grocers, should not be allowed except upon the prescription of a physician. No patent medicines should be permitted to be offered for sale unless there be printed upon the label of each bottle a true formula of the preparation, and any bottle found to depart from the formula should subject the manufacturer to a heavy penalty, and forever debar that preparation the right of sale within the State. Should a preparation contain any drug which would prove harmful, if taken indiscriminately, it should be sold only by druggists, and then on the prescription of a physician.

Reviews and Book Notices.

The Medical News Visiting List, for 1895.

This popular list, published by Lea Brothers & Co., Philadelphia, is well up to the standard of the lists for

former years. It contains valuable tables, such as drugs and their doses, rules for resuscitation of drowned persons, of incompatibles, the eruptive fevers, poisons and their antidotes,

therapeutic remedies and rules for the ligation of arteries. The body of the volume is divided into sections for calls, obstetric engagements, cash accounts, etc., and is provided with a pocket and pencil.

A Manual of Modern Surgery,

General and Operative, by John Chalmers DaCosta, M.D., Demonstrator of Surgery Jefferson Medical College, Philadelphia. Cloth; Octavo; 809 pages. Price \$2.50. W. B. Saunders, Philadelphia, 1894.

This volume seems to be a happy medium between the exhaustive textbook, and the superficial compendium. The first chapter is devoted to bacteriology, and though necessarily incomplete, it will serve to make clear to the general reader the very important relation that this branch bears to surgery, and will stimulate his appetite for a closer study. The author says in his preface: "Obsolete and unessential methods have been excluded in favor of the living and the essential.

. . . There has been no attempt to exploit fanciful theories nor to defend unprovable hypotheses, but rather the effort has been to present the subject in a form useful alike to the student and to the busy practitioner." The volume is illustrated by 188 cuts in the text, and 13 full-page plates in colors and tints, and is one of Saunderson's New Aid Series.

Annual of the Universal Medical Sciences.

A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sajous, M.D., and Seventy Associate Editors. In five octavo volumes. The F. A. Davis Company, Philadelphia, 1894.

This is the seventh edition of this valuable work, and our readers are already familiar with its general scope. The general characteristics that marked the preceding editions are retained in

this. The editor has been ably assisted by eminent men of all countries, who have thoroughly gleaned the medical literature during the past year and collected all that is new and interesting. References are made by number and date, and each volume contains a list of all publications from which extracts are made, with the post-office address of each, so that any one desiring to read the entire article from which the extract was made will have no difficulty in securing the journal from its publishers. The work is invaluable to those who desire to study some special subject, and no one will go amiss in having it upon the shelf.

Obstetric Surgery. By Egbert H. Grandin, M.D., Obstetric Surgeon to the New York Maternity Hospital, etc.; and George W. Jarman, M.D., Obstetric Surgeon to the New York Maternity Hospital, etc., Eighty-five (85) Illustrations in the Text and Fifteen full-page Photographic Plates. Royal Octavo, 220 pages. Extra cloth, \$2.50, net. The F. A. Davis Company, Philadelphia.

We have, in the volume before us, a work that will prove of great usefulness to the general practitioner. The facts set forth in the volume are based on the rich experience of the authors as obstetric surgeons to the New York Maternity Hospital. All operative procedures in obstetrics are discussed and those which are preferable are thoroughly explained and illustrated by diagrams and photographic plates.

In the Introduction obstetric asepsis and antiseptics are discussed, and as an evidence of the author's faith in them we quote the last paragraph of this section, which says: "*Aseptic and elective* obstetrics rob labor of its terrors and the puerperal state of well-nigh its sole risk.

The authors have gone minutely into all the details of the technique of all

the operations bearing upon obstetrical practice, from the induction of abortion and premature labor to craniotomy and the Cæsarean section. Upon all points upon which it touches the volume is well in keeping with the best teaching of the day. The country physician who, while riding home after a tedious operation for strangulated hernia or appendicitis, is suddenly stopped and called in to find a case of placenta previa or shoulder presentation, and that the only vessel in which to prepare his antiseptic solutions is an old tin basin, may not be able to carry out all the details as laid down in this most excellent work, but he will have in his favor the pure country air, which saves him many a misfortune which would befall his city brother who might venture to follow his example. However, by studying this volume, he will know "how the thing should be done" whenever it is possible to do so, and we would advise him to procure the book and heed its teachings.

The Pocket Anatomist. By C. Henri Leonard, A.M., M.D., Professor of Gynecology Detroit College of Medicine. Leather, 300 pages, 193 illustrations, post-paid, \$1.00. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

The 18th edition of this popular

anatomy is now before us; it is printed upon thin paper and bound in flexible leather so as to be specially handy for the pocket. The illustrations are photo-engraved from the English edition of Gray's Anatomy, so are exact as to their details. It briefly describes each Artery, Vein, Nerve, Muscle and Bone, besides the several Special Organs of the body. It contains more illustrations than any of the other small anatomies.

The Columbia Desk Calendar.

For ten years the desk calendar issued by the Pope Manufacturing Company has held a unique place among business helpers. Each daily leaf during that time has taught its quiet lesson of the value of better roads and outdoor exercise, and especially the benefits of bicycling. The calendar for 1895, which is just issued, is even brighter than its predecessors in appearance, as clever artists have added dainty silhouette and sketch to the usual wise and witty contributions that have heretofore given this popular calendar its charm. It can be had for five 2-cent stamps from the Pope Manufacturing Company, Hartford, Conn., or from any Columbia bicycle agency.

Abstracts.

TRAUMATIC CATARACT IN CHILDREN.
—Dr. James Moore Ball (*Medical Herald*) gives 2 cases of traumatic cataract in children successfully treated by extraction of the lens. The first case was a boy, aged 9, struck in the eye by a needle, which pierced the cornea

near its centre and entered the lens. A portion of the lens substance protruded through the puncture, forming a rounded mass with pedicle. On account of the condition of the lens, much of which was not softened, he avoided the classical linear method and

made the extraction by passing a Græfe knife at the apparent corneo-scleral junction and severing about two-fifths of the circumference of the cornea. The lens was extracted through a natural pupil and the eye dressed antiseptically, the dressing being kept moist with a solution of bichloride, 1-300. The vision in sixteen days equaled 18-20. The second case was a boy aged 11. The eye was wounded by a thorn. On examination the conjunctiva was congested, the peri-corneal vessels dilated, and the anterior chamber nearly obliterated by the pressure of a swollen lens and great increase of intra-ocular tension. The eye had been painful for three days, though at the time of the accident and for several weeks there was no pain. Again the linear operation was avoided, as it was deemed that much of the lens could not be removed in that way, being unsoftened. The incision was the same as in the former case except for being one millimetre in advance on account of the bulging of the iris. The greater part of the lens was softened and followed the knife. While working out some of the cortical matter there was a sudden gush of vitreous, which was immediately cut off, only to be followed by more. The lid was gently but firmly closed and an antiseptic dressing applied. The next morning the corneal wound was found closed and the anterior chamber restored. The case progressed favorably, and at the end of fifteen days vision was 15-30. The successful issue of these two unfavorable cases leads the author to believe that the accepted treatment (linear extraction) is a mistake.

TREPHINING FOR ACUTE CEREBRAL MENINGITIS.—Dr. B. Merrill Rickerts,

in an address before the St. Louis Medical Society (*Medical Review*) said that this operation is based on the principle that an abnormal quantity or quality of fluid should be removed wherever found, no matter in what cavity or portion of the body it may be. Acting in accordance with this principle, the speaker recently trephined a child 18 months old, which had simple cerebral meningitis. The operator was not called, however, until the child had been comatose for eight days. At that time the child had not taken nourishment of any kind for eighteen hours, not being able to swallow anything whatever. It had not moved its arms or legs; had given no indication of sensibility; there was left facial paresis; the pupils were contracted. The right parietal region was trephined with a gouge, without an anesthetic. Five minutes after the arachnoid has been opened the facial paresis had disappeared. The left parietal region was immediately trephined as low down as possible in order to insure good drainage. Two ounces of clear straw-colored fluid escaped in the next fifteen minutes. The two operations were performed in fifteen minutes, and at the end of that time the child could move its arms and legs, cried aloud, could swallow water, and continued to take liquid food for the next 26 hours. After 28 hours dissolution took place. It is reasonable to suppose that this child would have recovered if the operation had been done as soon as pressure symptoms manifested themselves.

The question arises, how, and to what extent, can we drain the arachnoid cavity? It is understood that there is an arachnoid cavity, and that

this cavity is a continuous one. If this is true, it looks as though we could drain it by one trephine. This is impracticable, however, and better drainage is insured by trephining both parietal regions.

If there is fluid in the ventricles, it may be drained by tapping them, as the toleration of the brain substance is wonderful. This drainage has been accomplished by Dr. Moyer, of Chicago, by inserting a canula fitted with a little door or cover which could be opened or closed *ad libitum*. In another instance the ventricles were drained through a tube into the cellular structure of the scalp, the fluid being removed by re-absorption. The idea is certainly unique, and perhaps it may be practicable to do it.

BICHRIMATE OF POTASSIUM AS A REMEDY IN GASTRIC AFFECTIONS. — We offer the following synopsis of a paper on the above subject, which was read at the International Medical Congress by Prof. T. R. Frazier: Notwithstanding the assertion made in 1883, by so high authority as Vulpian, of the value of bichromate of potassium in the treatment of several forms of gastric disturbance, this substance has not yet gained a position among the many substances that are used in the treatment of these affections. Having, in 1884, treated with gratifying success a case of persistent gastric disorder by the administration of small doses of bichromate of potassium, I have since that time administered it in a large number of cases, and the results have been so favorable that I feel myself justified in now stating my opinion of the therapeutic value of the

substance. The cases have been recorded in two groups, the first group comprehending 18 cases of various forms of dyspepsia unassociated with evidence of gastric ulcer, and the second group, 10 cases in which distinctive symptoms of ulcer had been present at some previous time. The doses administered in the above cases have varied from $\frac{1}{2}$ grain to 1.6 grain, twice daily, and in most instances the smaller dose was found to be sufficient. The dose should be given during fasting and on as empty a stomach as possible. The administration was effected in the form of pills or an aqueous solution which may be flavored with tolu or orange. An examination of these cases shows that bichromate of potassium is capable of relieving, and often in a short time of removing, the entire group of symptoms—if we except constipation and anemia—encountered in dyspepsia, and especially pain, nausea, vomiting and gastric tenderness. In a few cases of acute gastrice ulceration, with hematemesis, in which I have given bichromate of potassium, the results were not favorable, as it did not succeed in checking the bleeding. Bichromate of potassium possesses a strong anti-putrefactive power, which is exhibited in albuminous, saccharine and phosphatic urines, even with a 0.01 solution. This action probably constitutes one of the causes of its anti-dyspeptic therapeutical value, but there are undoubtedly other causes, such as direct or indirect analgesic action, and probably a selective action on the nutrition or function of certain histological structures, which I am now engaged in endeavoring to determine.—*Lancet*.

THE PUBLIC SERVICE.

THE ARMY.

Three weeks ending December 26th, 1894:

Stark—Leave of absence for one month is granted 1st Lieut. A. N. Stark, Assistant Surgeon, to take effect on his return to Fort Sam Houston, Texas.

Glennan—Capt. James D. Glennan, Assistant Surgeon, is relieved from duty at Fort Sill, Oklahoma Territory, and ordered to Fort Snelling, Minn.

Morris—Capt. Edward R. Morris, Assistant Surgeon, on the arrival of Capt. Paul Glendenin, Assistant Surgeon, at Fort Warren, Mass., will be relieved from duty at that post, and will report for duty at Fort Spokane, Washington.

Swift—The leave of absence granted Capt. Eugene L. Swift, Assistant Surgeon, is further extended two months.

Flagg—1st Lieut. Charles E. B. Flagg, Assistant Surgeon, now on duty at Angel Island, California, will report in person at Fort Townsend, Washington, for temporary duty at that post.

Frick—Capt. Euclid B. Frick, Assistant Surgeon, is granted leave of absence for four (4) months.

Brewer—Lieut. Madison M. Brewer, Assistant Surgeon, upon the expiration of his present leave of absence, will be relieved from duty at Fort Riley, Kansas, and report for duty at Fort Keogh, Montana.

Porter—Leave of absence for four months on surgeon's certificate of disability, with permission to leave the Department of Dakota, is granted 1st

Lieut. Alexander S. Porter, Assistant Surgeon.

Promotions.

To be Assistant Surgeons, with the rank of Captain, after five years service in conformity with Act of June 23, 1874:

1st Lieut. Charles Willcox, Asst. Surgeon, Oct. 23, 1894.

1st Lieut. Harlan E. McVay, Asst. Surgeon, Oct. 29, 1894.

1st Lieut. Euclid B. Frick, Asst. Surgeon, Oct. 29, 1894.

THE NAVY.

Three weeks ending December 29th, 1894:

Pigott—P. A. Surgeon M. R. Pigott, from Chelsea Hospital and to Mare Island Hospital.

Evans—P. A. Surgeon S. G. Evans, from Mare Island Hospital and to the U. S. S. "Pinta."

MARINE HOSPITAL SERVICE.

Fifteen days ending December 15th, 1894:

Stoner—Surgeon G. W. Stoner, granted leave of absence for twenty days. December 10, 1894.

Rosenau—Passed Asst. Surgeon M. J. Rosenau, to report at Bureau for special temporary duty, December 10, 1894.

We understand that the enterprising house of Parke, Davis & Co. have started the preparation of antitoxin serum, but it will necessarily be some time before it can be offered for sale.

In writing to advertisers, we will be glad if you will mention this JOURNAL.

Miscellaneous Items.

Read the advertisements, Doctor, and when you write to the advertisers mention the fact that you saw the ad in this JOURNAL.

Tincture of chloride of iron, given in Seltzer Water, is said to make a pleasant drink and obviate the tendency to constipation.

We regret to learn of the death of little Mary, the 9½ year old daughter of Dr. J. W. Long, of Richmond. She died on October 2d, 1894, of diphtheria, after an illness of only five days.

A midwife in the western part of North Carolina is said to have confiscated a new-born babe because her fee was not paid. She was frightened into returning it. Register midwives and

require that they have some intelligence and education.

The general practitioners are really our best diagnosticians and clinicians. I would say that the specialist should not only be a general practitioner, but he should first have been a country practitioner; second, a city practitioner; third, a specialist. Specialists should grow, not spring up like mushrooms.—DR. JOSEPH PRICE, before the Philadelphia Obstetrical Society.—*Ex.*

The following is the health report of Wilmington for December, 1894:

	Whites.	Col.	Total.
Population.....	9,000	13,000	22,000
Deaths.....	9	22	31
Death-rate represented.	12.00	20.3	16.9

Good results in the treatment of diphtheria with antitoxin serum continue to be obtained.

Reading Notices.

MORLEY, Mo., February 2, 1894.

*Dios Chemical Co.:—Gentlemen:—*In reply to yours of the 21st inst., will say that I gave the sample of Sennine a test as an antiseptic in a case of suppurative ulcers, and also in a case of chronic diarrhoea, and am much pleased with its actions. With bad fetor of breath in long-standing cases of intestinal troubles, I think it has no equal.

C. C. HARRIS, M.D.

NERVOUS HEADACHE.—R. Williams, Surgeon, 69 Vauxhall Road, Liverpool, Eng., says: I obtained very good results from the use of Celerina in cases of nervous headache arising from general debility. The patients made rapid progress by taking Celerina in teaspoonful doses, thrice daily. Ordinary

treatment had failed to give much relief or satisfaction previous to taking Celerina. In conclusion, I consider the preparation will not in any way disappoint any physician in its therapeutic effects, but will be found a reliable remedy for the purposes indicated.

Fluid Extract of Kola is a valuable tonic stimulant. Unfortunately, however, it is acrid and bitter in taste, and taken in this form is unpalatable. Messrs. Frederick Stearns & Co., of Detroit, Mich., have devised a compound which they call "Stearns' Kola Cordial." . . . Physicians desiring to test this new product will be sent samples for clinical test on request.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, JANUARY 20, 1895.

No. 2.

Original Communications.

SKIN GRAFTING FOR KELOID.*

BY GEORGE H. MALLET, M.D., Instructor in Diseases of Women in New York Post-Graduate School and Hospital; Acting Assistant Gynæcologist to New York Cancer Hospital and St. Bartholomew Clinic; Assistant Gynæcologist to Woman's Hospital Out-Patient Department, etc.

To find out if a disease is difficult or easy of cure, one has but to glance at the number of remedies offered for its relief. The object of this communication is to add another to the already long list of procedures devised for the cure of keloid.

Before proceeding to the cure it may be well to glance over the nature of the disease, with which you are doubtless all familiar.

Keloid is characterized by projections of new growth of connective tissue, composed of closely packed fibres that are generally arranged parallel to the surface of the tumor. They vary in size, color and consist-

tency. The etiology is unknown. According to some authorities, it may develop spontaneously, or from irritation, or from a simple scar following boils, carbuncles or pustules, acne or lupus, but most frequently after wounds or operations. Sutton denies that Keloid occurs spontaneously, but says that clinical observation has shown that it often arises in scars left by such slight injuries that they have been forgotten.

They begin as a small tubercle or nodule well embedded, but slightly elevated above the skin. They slowly increase and vary in shape. They commonly are oval masses sending projections into the surrounding skin, or they may be elongated, cylindrical,

*Read before the Alumni Association of Charity Hospital, November 7, 1894.

or as disks or plates, or cord-like elevations.

The color is usually white or pink or reddish and shiny; the surface is smooth to the touch; the tumor is firm but elastic, the centre portion being denser and harder than the circumference. The most frequent sites are the sternum, sides of the chest, mammæ, back and neck. The lesion is sensitive to pressure and pain may also be spontaneous and of a pricking and burning character. Sometimes itching is experienced. These symptoms are seldom constant, but occasionally may be so steady as to incapacitate the patient.

Keloid never ulcerates and shows no tendency to undergo change except in those very rare cases in which involution occurs.

The diagnosis is easy. It can be distinguished from healthy cicatricial tissue by its color, pain on pressure and presence of spontaneous pain and by the presence of blood-vessels and sudoriferous glands. In the treatment of this condition many drugs have been used internally and locally, but have been of no avail. The galvanic current, scarification, sol. of chloride of methyl (freezing mixture) have been used and abandoned.

Boaz, of Paris, and Hardaway and Morrison, in this country, have used electrolysis with some success. Duhring recommends the application of caustic potassium, and Piffard has reduced the growth by incision and the application of acetic acid. Simple excision is useless. The growths have been removed many times and always recur.

The procedure to which I wish to call your attention is excision with

skin grafting by Thiersch's method. In looking over the literature at hand, I find no record of the operation by this method for the relief of this condition. In the *Medical Record* of August 11, 1894, it is noted that Broca excised from the back of the hand and thumb an extensive keloid following a burn, and a flap from the abdomen was grafted upon the denuded surface and its pedicle severed on the tenth day with a perfect result, Thiersch's method seems to me much simpler and more generally applicable than the above.

In advocating a mode of treatment I realize that it is customary to relate a series of cases cured by the procedure advised. In this instance I shall depart from that time-honored custom, for the result in the case that I shall lay before you the most enthusiastic could hardly call brilliant.

The patient, a young woman, had a cœliotomy and Alexander's operation done five years ago. The wound, she says, headed up very well, and she thinks without suppuration. About three months after the operation she began to experience burning and pricking sensations in the cicatrix; then the cicatricial tissue began to grow and became very sensitive. She was then treated with medicines internally and locally, but with no benefit.

One year ago she came under my observation. At that time the growth covered the line of cicatrix from symphysis to umbilicus and over that of the Alexander's on the left—the right seemed normal. At that time it was a little over half an inch in width and raised about a quarter of an inch above the surrounding tissue. It was red, shiny and extremely sensitive. The

whole cicatrix was then excised and the edges of tissue brought together with strips of adhesive plaster.

The patient was lost sight of for six months. When next seen the growth was found to have increased to about an inch in width along the whole line of incision and to have reached its former height.

She then tried electricity in its various forms with no result other than to increase the pain and tenderness, to say nothing of the severe pain caused by the applications. This she abandoned after a trial of three months.

Six weeks ago I excised the growth, taking care to include the projections into the skin, and then covered the

denuded surface with large grafts removed from the thigh after the manner of Thiersch, with the details of which you are doubtless all familiar.

The patient proved to be unmanageable, and, either from interference with the bandage or faulty technique in the operation, comparatively few of the grafts have taken, but those that did have assumed the appearance of normal skin, and, to my mind, prove the possibility and feasibility of the operation, and encourage me to believe that the next one that I do will be entirely successful.

The hope that others will try this method is my apology for presenting these fragmentary notes.

222 North 59th St.

HOSPITAL REPORTS—SOME CASES OF NEUROSES.

[Reported by Richard H. Davis, Senior House Surgeon.]

Service of J. Allison Hodges, M.D., University College of Medicine,
Richmond, Va.

CASE I.—*Persistent Melancholia and Nervous Depression Due to Laceration of the Peritoneum, Cured by Tait's Operation and the Excision of a Neuroma in the Cicatricial Tissue.*—Mrs. C., age 30, the mother of three children, date of last confinement, two years previous, was suffering, when admitted, from great nervous depression and prostration; was morose, irritable and complained of weight in the abdomen and vague spinal and lumbar pains. Upon examination, no sufficient cerebral or spinal lesion was discoverable, and not having

improved under treatment directed to this end, a vaginal examination was made. No uterine lesion was present, but an almost complete laceration of the perineum was found. Its lateral edges were composed of unusually thick and resilient cicatricial tissue, and there was an excessively sensitive protuberance at the lower junction of the angle of laceration. This laceration and resulting neuroma being sufficient to explain her symptoms, she was operated upon, according to Tait's modified method, the neuroma being

carefully excised at the same time. The result was all that could be desired, for in a few days her melancholia and general nervous irritability began to disappear, and when removed, ten days later, from the hospital, she evinced none of her former symptoms.

CASE 2.—*Pathological Gastro-neurosis: Symptoms of Gastric Catarrh, Improved by Treatment of Existing Endometritis.*—Mrs. J., age 25, married four years, sterile, suffering from neurasthenia, complained of pain after eating, heartburn, eructation of gases and frequent vomiting after meals. A remote family history of tubercular disease was given. No disease of heart or lungs could be elicited upon examination. The gastric secretions were examined and showed a healthy condition of the mucous membrane. Lavage of the stomach was instituted, and the patient was given constitutional treatment, but no improvement followed.

It being ascertained that there was a very slight leucorrhœal discharge present, vaginal injections were administered copiously twice a day. Subsequently a vaginal examination disclosed the fact that there was a slight stenosis, and that the uterus was anteфлекed and enlarged, giving evidence also of diseased uterine mucosa. The dilator and sharp curette were then employed for the relief of the existing endometritis, under antiseptic precautions, and the result was comparatively satisfactory, the dyspeptic symptoms improving at once. This amelioration of the symptoms was more marked, as the result of this surgical interference, than under all former general medication to which the patient had been subjected, but since leaving the hospital, it is learned that

there has been some slight return of the "vomiting after meals," the other gastric symptoms having been entirely removed. As this is evidently a reflex-neurosis, and as this was a case of long-standing endometritis, further use of the curette is imperatively demanded in order to effect a permanent cure.

CASE 3.—*Menstrual Hystero-neurosis of the Breast; Retroversion, Endometritis, Menorrhagia; Curettement; Cure.*—Mrs. E., age 38, married at 30, formerly of robust constitution, but health began to fail after the birth of her only child three years ago. Nervous symptoms developed, and great nervous and physical prostration ensued. She suffered also intensely with mammary pains, especially about the menstrual periods, and often with profuse menorrhagia. It was this latter condition which suggested operative interference, since the "drain" upon the system seemed to be so urgent. Accordingly, upon examination, there was found not only metritis and endometritis, but also retroversion of the uterus. Curettement and the scraping off of several excrescences from the uterine wall, promptly checked the hemorrhage and leucorrhœal discharge. The uterus was also replaced and held in position afterwards by antiseptic tampons. It was noticed by the patient later that the mammary pains also disappeared at the time of the operation, and she has not suffered since with any recurrence of them. While this secondary result was not the object of the primary operation, it was none the less desirable.

CASE 4.—*Pathological Genito-Reflex Neurosis; Spinal Pains Due to Laceration of Cervix; Disappearance after Repair of Laceration.*—Mrs. C., age 35,

was referred to hospital for treatment of intense spinal pain. The localized pain in the back had existed continuously since the birth of her last child four years previously. Every kind of treatment, local and general, had been invoked, but with unsatisfactory results. After her admittance central galvanization and utero-abdominal faradization were used with but temporary improvement. It was then decided to repair the cervical laceration which was present, in the hope of giving relief. There was an improvement in the pains almost immediately, and by the time union had taken place they had ceased entirely. In this case there was no decensus uteri or pressure upon the spinal column by an enlarged fundus, which is usually the exciting cause of this class of neuroses.

CASE 5.—Traumatic Epilepsy; Operation; Improvement.—A. E., male, age 20, received a fall from a nurse's arms when one year old, striking left side of head upon a block of wood. At the time of accident he had a convulsion and then an interval of six months before a return of the seizures. Within the last two years the epileptic attacks have been remarkably severe, the patient always losing consciousness. He has had as many as nineteen in one day and night.

Condition at the time of Operation.—There was an elevation on the left parietal bone just above the upper temporal ridge and behind the coronal suture. Pressure on the cicatrix caused pain, and a sullen countenance and dullness of the mental faculties was very apparent. His memory was not retentive, and there was a tendency manifested in some of the attacks to-

wards maniacal frenzy. He had a distinct aura, pain being felt in the region of his stomach before most of the convulsions.

Operation.—Semi-circular incision of scalp, pericranium being detached at the same time. The cranial vault was then trephined over the site of the injury with an inch and a half conical-shaped trephine under absolutely aseptic conditions. The dura mater was found firmly adherent to inner table of calvarium; it was detached and was discovered to be thickened, vascular and highly congested, a sufficient cause, presumably, for the existing lesion. The edges of the circular incision were then made perfectly smooth, the wound closed and dressed antiseptically, no covering being used except the pericranial flap.

Result.—The wound united perfectly by the sixth day, when sutures and dressings were removed. The patient had no epileptic seizure till he took the train for home, when he suffered two slight attacks. Since that time, now a little more than one month, there has been no recurrence of the convulsions. His mental condition has improved considerably, but it is yet too early to predict the ultimate result.

CASE 6.—Traumatic Epilepsy; Operation; Improvement.—C. B., age 59, good family history. First epileptic convulsion occurred in December, 1864. In May of that year he was struck by a glancing minnie ball, while in battle, on the left side of the head and fell unconscious. Since the first seizure he has averaged five or six daily, most of them occurring at night. His loss of memory is his most noticeable symptom, his health otherwise being good.

He has no aura and the majority of the attacks are of the petit mal type.

Condition at the time of Operation.—There was a linear depression on the left parietal bone, just above and parallel to the horizontal line of the squamous suture. His health was apparently robust, but there were evidences of incipient imbecility. He complained of failing memory, and desired to be relieved by surgical means, if possible, all other forms of medication having failed.

Operation.—Performed as in case above. No fracture of inner table of skull found, but the osseous tissue of both tables was very much thickened; dura mater was thickened, but not adherent. All of the hyperplastic bone tissue was removed, and since there was no suspicion of implication of the cortical area of the brain, the

dura was not incised, the thickened condition of the surrounding plate of bone being thought sufficient to produce the lesion.

Result.—Wound united throughout on sixth day without the formation of pus. One mild convulsion on night of operation, two others three days later, and then an intermission up to present time, nearly six weeks. On tenth day after operation, three days after reaching home, there was noticed some aphasia and slight paralysis of left leg, but these symptoms are now passing away. His memory has improved very much; he says that occurrences following the battle of Chancellorsville, where he was wounded, which were forgotten by him, are now vivid pictures in his mind. In this case, likewise, it is yet too early to predict with certainty the result of this operation.

Selected Papers.

A CLINICAL STUDY OF EMPYEMA IN CHILDHOOD.*

BY W. E. HUGHES, M.D., Ph.D., Philadelphia.

Empyema was formerly considered rather as an accident occurring in the course of sero-fibrinous pleurisy brought about by poorly-conducted attempts at exploration or operative interference, or if found without any previous violence, as caused, on the one hand, by some inherent tendency in the system of its victims towards a conversion into pus of such serous exudations, or on the other, by an ac-

quired dyscrasia, which again predisposed to pus-formation. As its origin was shrouded in mystery, so was its prognosis uncertain and its treatment along lines which were necessarily indefinite. Now that careful bacteriological investigation has shown its true nature, we are able to discuss it more definitely and to recognize it as entirely separate and distinct from any other variety of pleurisy. While the empyema of childhood is not at all to be

*University Medical Magazine.

thought of as constituting a separate variety of the disease, yet it presents here certain peculiarities which make a special study well worth while. Disease processes are much less complex at an early age than in later life, and the actual causes of empyema existing then are much more easily and definitely determined. My somewhat elementary treatment of the subject, and a possibly prolix statement of facts already well established, may be pardoned when it is remembered how little the true nature of empyema is appreciated by the profession at large. Two points cannot be too strongly accentuated here, that empyema is much more common in childhood than is often supposed, and that it is a distinct entity, is primary, and has no direct relationship with sero-fibrinous pleurisy. Having these facts clearly in mind, it becomes difficult to escape a correct diagnosis, and the diagnosis is made at a time when it will be of the most service. But, having recognized the condition, other considerations are of essential moment in prognosis and become of paramount importance in treatment. Bacteriological study has shown that in the pus of all pyemas micro-organisms are present: these constituting the cause, at the same time serving to divide the disease into distinct varieties, the recognition of which, while not always possible, is yet of great importance. The micro-organisms concerned may be divided into three classes: pneumococci, tubercle bacilli and pus organisms, and these produce empyemas as distinct in their nature and symptoms as in their etiology. The introduction of these micro-organisms into the pleural cavity takes place undoubtedly

in the vast majority of instances by way of the lungs, but there is a small, yet still appreciable, number of cases where the lymphatics, or even the blood-vessels, are the pathway and the lungs are uninvolved. Even where introduction takes place immediately from the lungs, the initial lesion in them may be so trifling as to be unrecognizable, and thus unavailable for diagnostic purposes. The condition of the pleura would seem to be of much importance. It is certainly an open question whether a healthy pleura would not destroy any ordinary irruption of germs, and whether it is not, in most instances, at least, necessary to have a previously existing abnormal state of this membrane before we can have a soil suited to the development of the specific germs of empyema. In those scattered cases where a serous effusion has spontaneously become purulent, either the germs were introduced subsequently to the pleurisy and thrown upon a soil previously fitted for them by disease, or they, in the beginning, had not sufficient virulence to produce pus, but merely a serous exudate. The first of these two hypotheses certainly seems the more tenable.

In the greater number of cases in children the pneumococcus is the causative germ. Almost of necessity introduced by way of the lungs into the pleural cavity, it is still not necessary that we should have a preceding pneumonia, though those cases which have been carefully watched from the beginning will generally be found to have thus eventuated, and in the others the history will, as a rule, point quite strongly to an initial pneumonia. So frequent is this that it is of diagnostic

importance, and will alone serve to point strongly 'owards a metapneumonic empyema, though microscopic examination is always necessary to an absolute determination of the variety. While the entrance of the pneumococci into the pleural cavity is probably coincident with the height of the pneumonia, yet the symptoms of the empyema rarely develop at this time, the pneumonia will run its course, there will be an interval of some days, or sometimes a week or more, during which the condition, if not wholly satisfactory, is at least such as to make us believe that the trouble has passed before the empyema begins to manifest itself. The amount of lung involved has little to do with the incidence of the empyema, often the physical signs and the trifling nature of the symptoms are such as to suggest rather than a lobar a slight broncho-pneumonia. Metapneumonic empyema being the commonest form in childhood, accounts for the comparatively favorable prognosis at this age, and determines the somewhat peculiar course, as will be pointed out further on. In addition to the presence of the pneumococcus there must be another element which determines the incidence of empyema, for it is well known that there may be pneumococci present when the effusion is not purulent. What this element is, is doubtful, but it must be some condition antedating the entrance of the pneumococcus, for this form of empyema is invariably acute and primary, and never follows a sero-fibrinous pleurisy.

Tubercle bacilli may, unaided, produce empyema; at least in a certain number of cases these organisms, and these alone, have been found in the

pus. The commonest form of tuberculous pleurisy in childhood is, of course, that in which the exudate is sero-fibrinous. It is interesting to note here that, while in the serous exudate it may be impossible to find the bacilli, and whenever they are present their numbers are few, in empyema they exist almost constantly and usually in considerable quantities, rendering the differentiating of this variety comparatively easy. This form of empyema is apparently rare in childhood, yet clinical facts lead me to believe that more careful investigation will show that it is more common than is now apparent. When it does occur it seems to be a sequence of tuberculosis of the bronchial lymph-glands, rather than of the lung, and is not likely to lead to a secondary pulmonary involvement, but to a generalized miliary tuberculosis. It is necessary to bear this fact in mind, as this form of empyema is very likely to be localized.

In the last variety, that produced by any one, or more usually, several of the pus organisms, most prominent among which are streptococci and staphylococci, we have to deal with a form whose etiology is less clear than that of either of the others, and whose symptoms and prognosis are less definite. It is possible that the organisms may, like the pneumococci, gain access to the pleura by way of the lungs, but this is here only exceptionally the case, and the lymphatics are the common path. This variety is the one which usually follows the infectious fevers, resulting either from the germ, which is their cause, or from any of the numerous swarm which follows in their wake. Not at all infrequently a nidus for the germ is formed by a

serous effusion, so that in this form we find best exemplified the changing of a serous into a purulent exudate. Of the predisposing causes of this variety, scarlet fever seems to be the most frequent, though it may follow any other of the fevers, or, in fact, any lesion which will admit pus-producing organisms.

Finally, while I have spoken of clearly-marked varieties, yet it must be recognized that in most cases we have to do, to a certain extent, with a mixed infection where the micro-organism present in greatest numbers determines the type. It is to be doubted that even the most typical examples of metapneumonic and tuberculous empyemas are really due wholly to their respective specific germs. There is, probably, in all of them a rôle of a certain importance played by the pus organisms. However, though these organisms may play a part, it seems but a secondary one; where the pneumococci or tubercle bacilli are prominently present they determine the type of their respective varieties and have most to do with their course and termination. But whether or not we concede the existence of specific varieties, the important fact still remains that an empyema is invariably due to micro-organisms; that it is a disease in itself, and is primarily empyema, or has, at least, the potentiality of becoming an empyema.

Symptoms and Diagnosis.—Clinically, two well characterized divisions may be made, and the line of demarcation between them is more sharply drawn in childhood, owing to careless inattention to symptoms which would attract attention to their ailment. It is

this very fact that a serious disease in childhood so often lacks expression, that should suggest the possibility of the occurrence of empyema, when conditions are favorable and symptoms indefinite, and keep us on our guard against mistaking it for some less serious disorder. These divisions are, first, that in which the disease is pronounced from the beginning, and where attention is attracted immediately to the chest by prominent symptoms; and, second, that in which the onset has not been noticed and the progress of the disease has been marked only by a general deterioration, on a superficial examination no symptoms of any respiratory trouble presenting themselves. The difference between the two clinical forms is an artificial one and not real; it depends partly on the etiological variety of the disease, and partly, as was said, on lack of observation or of expression of symptoms, thus, in those cases which are least urgent, leading to a minimizing of the gravity of the condition.

For diagnostic purposes this division is of a certain amount of importance, for when the onset has been insidious; pneumonia could with certainty be excluded, and we should have to deal only with a question of the nature of the fluid. Considering empyema of both types, we have first to differentiate between pneumonia and pleural effusion, and then, when the fact of the existence of an effusion is established, the determination of its nature.

In the first form, which may be called acute, in contradistinction with the second or latent, the attack will very likely have been ushered in by the symptoms of pneumonia, for it is the metapneumonic empyema that is most

frequently sharply marked and acute. It is for this very reason that a mistake is likely to be made here in diagnosis. Pneumonia has been clearly recognized, and when the child's condition fails to improve satisfactorily after a proper lapse of time, the tendency is towards regarding the case as one of retarded resolution in pneumonia rather than of empyema. The close similarity between the physical signs makes this mistake the easier. A point of distinct value in diagnosis here is this: when empyema has supervened upon a pneumonia it will generally be found to have commenced after the case has advanced some steps towards recovery, and there will have been then a period of amelioration of symptoms with a subsequent increase in gravity. If, on the other hand, there has happened not an empyema, but simply delayed resolution, or even abscess of the lung, there will have been no such temporary improvement. If the empyema has supervened during the acuteness of an attack of pneumonia the general symptoms will be of little use and sole reliance will have to be placed upon physical signs. Even when an effusion has come on during the course of, or subsequent to a pneumonia, it is not necessarily purulent, and the diagnosis has still to be made between empyema and sero-fibrinous pleurisy. When there has been no antecedent pneumonia, and this acute form of empyema has been primary, a variety which is likely to be not metapneumonic, but that due to pus organisms, the symptoms are so like those of pneumonia, as to make a diagnosis based wholly upon them difficult or altogether impossible.

These symptoms—and this applies

equally to pleurisy and empyema, for whether the effusion be serous or purulent, the symptoms in the beginning of an acute case are practically identical and indistinguishable from each other—are sharp pain, fever, distressing constant cough, dyspnœa, manifested by rapidity of respiration and by play of the *alæ nasi*, and such general disturbance as would be due to the increase of temperature. The fever in such a case is almost uniformly high, with no more fluctuations than would be the case in pneumonia. It is only much later that distinct remissions may occur, and even then they are the exception rather than the rule. When they do occur they would point strongly towards empyema rather than pneumonia or serous effusion. Profuse sweating is only uncommonly present and is of little importance. As between pleural effusion and pneumonia—for, as has just been said, whether the effusion be serous or purulent, the symptoms in a marked and acute case are the same—the only symptoms which have seemed to me to have any diagnostic importance are dyspnœa and pain. In empyema the dyspnœa has often seemed to be more sharply accentuated than in pneumonia, the respirations are no more rapid, but there is a more noticeable play of the *alæ nasi*, a more evident sense of discomfort. Pain, too, is greater, and this pain is to be gauged, not by the expression of the child, but by a hyperæsthetic condition of the affected side of the chest. It is probable that this hyperæsthesia is accountable for the more pronounced dyspnœa. But these symptoms are merely suggestive and not of any convincing importance, they serve only to accentuate the results of

physical examination. When the empyema is latent, a condition which finds its best type in the tuberculous variety, though it may exist in either of the other two, symptoms pointing towards disease of the respiratory apparatus may be few and indistinct, even when they are carefully and intelligently sought for. The superabundant vitality of a child, with the enormous activity of its reparative processes, leads it to bear, with surprising equanimity, the most deadly inroads of disease, if these be but made slowly, and this form of empyema exemplifies this most fully. I have seen a child playing about and to all appearances not seriously ill, with a pleural cavity full to the apex with pus. While the heart is not too much embarrassed there will be but little dyspnœa, and strangely the pus seems to have little effect upon the system. There is always some dyspnœa, but this is shown only by the nose. Fever may be entirely absent, or present in such slight degree as to attract no attention. In the earliest childhood, if there be fever, it is likely to be of a continuous type. It is in older children that distinct remissions show themselves and hectic begins to become evident. When such remittent temperatures are encountered, they are, of course, of extreme importance diagnostically. From the nature of the symptoms and the course of the disease there can be no pneumonia, and where it is a question solely of the nature of a pleural effusion, a hectic temperature will point almost unfailingly to empyema. Sweating is a symptom which is frequently present, and, though it is not usually profuse, yet it is probably the most important of all as indicating very strongly an

empyema. Seeing, then, that in the latent form the symptoms are so poorly marked, and in the acute form so closely similar to those of pneumonia, it is evident that our only valuable diagnostic guide is that furnished by physical signs, but even here we are often at fault, since the chest-walls in a child are so thin and elastic that the physical signs of an effusion may exactly simulate those of consolidation.

—
To be continued.

PREPARATION OF DIPHTHERIA ANTITOXIN.—Aronson (*Berlin klinische Wochenschrift*, Nos. 18 and 19, 1894) finds that the antitoxic serum can be manufactured by immunizing calves, goats, sheep, horses and dogs. He begins the immunization by injecting the animals with bouillon cultures of the diphtheria bacillus which have been exposed for one hour to the temperature of 70° C. After this, cultures exposed to 60° C. are used; then cultures to which trikresol has been added, the bacteria killed and the cultures preserved. He found that the virulence of the cultures could be greatly increased by the application of oxygen to the cultures.

It seems difficult to immunize large numbers of animals, as they may be lost through too active treatment, and sometimes die without distinct pathological lesions, under which circumstances the greater the number under treatment, the greater the number lost.

To estimate the exact value of the serum of such prepared animals he uses the method of Behring and Ehrlich, and mixes with the toxin the smallest amount of the antitoxic serum required for its neutralization.—*Univ. Med. Mag.*

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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This JOURNAL is published on the fifth and twentieth of each month, and any subscriber failing to receive his copy promptly, is asked to announce the fact to this office.

Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

All communications, either of a literary or business nature, should be addressed to, and remittances made by P. O. Order, Draft or Registered Letter, payable to ROBERT D. JEWETT, M.D., P. O. Drawer 810, Wilmington, N. C.

Editorial.

THE ANTITOXIN TREATMENT OF DIPHTHERIA.

Continued and more extended reports from physicians who have had an opportunity of treating diphtheria with the serum from immunized animals, go to confirm the claim that the death-rate is very greatly reduced by this treatment from that under any of the former methods. Reports are being published in the various journals, giving the results as obtained by observers in the United States as well as in foreign countries, and these all exhibit very gratifying results. It will not, of course, be wise to permit enthusiasm run riot and lead us to overlook certain factors which tend to produce this lowered death-rate and which are not dependent on the action of the serum. The reports from which comparison

can be made with former results are from series of cases treated in hospitals, and while formerly many mild cases were treated in private, now these are immediately sent to the hospitals where they may receive the antitoxin treatment, private practitioners not being allowed to obtain the remedy. Thus the proportion of mild cases in the later series is greater than in the earlier series and naturally tends to reduce the mortality. On the other hand, we have to remember that in the earlier series there were probably many cases that were not true diphtheria, while in the later all cases have been proven to be diphtheria by the detection of the Klebs-Loeffler bacillus in the cultures from the throat.

The *Boston Medical and Surgical Journal* has collected a brief *resumé* of the statistics published during the

year upon the use of the remedy, which we give below :

"Katz has reported from the Friedreich's Hospital, Berlin, 128 cases, with a mortality of 13.2 per cent. For the three years, 1890 to 1893 inclusive, there were treated at the same hospital 1,081 cases, with a mortality of 20 per cent.; Ehrlich, Kassel and Wasserman 67 cases, with tracheotomy, mortality 44.9 per cent., and 153 cases without tracheotomy, mortality 23.6 per cent.; Aronson 192 cases, mortality 13 per cent.; Raux 448 cases, mortality 24.33 per cent.; Weilger 63 cases, mortality 28 per cent. In the *British Medical Journal* there have been reported 39 cases, treated by various practitioners, mortality 7.6 per cent. Bokai, of Budapest reports 35 cases, mortality 14.33 per cent., the average mortality for the last three years being 53.8 per cent. Börger has lately reported from Griefswald 30 cases, mortality 7 per cent. Kuntz reports 25 cases from Oschersleben, mortality 12 per cent.

"In this country, Welsch has reported 4 cases treated at the Municipal Hospital, Philadelphia, with 1 death, mortality 25 per cent.; White, of New York, 20 cases, mortality 25 per cent.; Williams, of Boston, 6 cases, mortality 17 per cent.; Körte, from the Hospital in Urban, reports 121 cases, mortality 33 per cent.; 106 cases were treated without antitoxin during the same period, mortality 45 per cent.; 37 mild or moderately severe cases, when the treatment was begun before the third day, gave a mortality of 3.3 per cent."

All these 1,369 cases show an average mortality of about 25 per cent., being a collection from hospital and private practice in Europe and America under the most varied conditions. A report of 231 cases occurring at the Trousseau Hospital, Paris, during October and November, with a mortality of 14.71 per cent., has just been published. Behring believes that a specific

treatment for diphtheria and tetanus has been found, and also has hopes that tuberculosis and pneumonia may be added to the list.

HAVE YOU PAID YOUR SOCIETY DUES?

The Constitution of the State Medical Society provides that any member who is delinquent in his annual assessment two successive years, and fails to pay after due notice from the Treasurer, shall not receive the Transactions of the Society until he has so paid. Under this provision we are sorry to see that there are quite a number who will fail to receive the Transactions for the 1894 meeting. Many of these, we are certain, have allowed themselves to get into this class simply through the proneness of physicians to *put off*. Some have been members of the Society for nearly a quarter of a century, and we are sure are deeply interested in its welfare.

This is a righteous provision, for there are expenses connected with the Society which have to be met by assessment on the members, and when one fails to respond, he is simply transferring his obligation to another; and it is a wise one, for a member is thus reminded that he is nearing that point where the Constitution provides that his name shall be dropped from the roll, viz: four years of non-payment. We hope, then, that those members failing to receive their copies of the Transactions, will immediately correspond with the Treasurer, Dr. M. P. Perry, Macon, N. C., and make their accounts straight. When they do this the Treasurer will notify the Secretary, and the transactions will be sent.

A VERY UNWISE BILL.

Just as we are about to close the Editorial Department, the press despatches bring the information that the following bill was introduced in the lower house of the Legislature on the 14th inst. :

“By Mr. Stevenson—To require the State Board of Medical Examiners to grant licenses to physicians regularly licensed in other States.”

The passage of this bill would be one of the greatest disasters that could befall the State, and we sincerely hope that there will be found in the Legislature a sufficient number of thoughtful men to prevent it. To North Carolina belong the credit and honor of being the first of all the States to throw a wall of defense around her citizens to protect them from the ignorance of quackery and the imposition of charlatanry. From time to time the laws have been improved, until to-day they are the best in the whole country, and serve as a model for other States which are rapidly falling into line in this important matter. The passage of the above bill would be about equivalent to the absolute repeal of our medical law, as far as some individuals would be concerned, for there are some States that, while they require a license, grant such a license upon almost any claims the applicant may present. All that would be then necessary for a man to do to practise medicine in this State, would be to procure a diploma from some cheap medical college, run into one of those States that grant a license upon the presentation of a diploma from any incorporated college, and then present this license to our Board and require them to issue him a license to

practise here. We acknowledge that it would be a good thing if the different States could so formulate their requirements that an interchange of licenses would not affect the interests of any, but so long as the requirements in some States are so low, it would never do, and if the above bill becomes a law, it will take the Old North State from her position at the head of the list and place her on a level with the lowest. It behooves the members of the profession and all men who would have the lives of our people entrusted only to the keeping of competent physicians, to bring to bear all their influence in preventing such a calamity as this bill would inflict. Write at once to your representatives in both houses and warn them of the danger of such action as is proposed. Do not delay a day or an hour, but write at once, before a vote is taken on the bill.

The Duffy Prize of Fifty Dollars is offered for the best essay on *Materia Medica*, Indigenous in North Carolina. The essay should be type-written, signed in *nom de plume*, and accompanied by a sealed envelope containing the name of the author and bearing upon its back only the *nom de plume* of the writer. It should be in the hands of one of the Committee thirty days preceding the Society meeting. The Committee consists of Dr. R. L. Payne, Jr., Lexington; Dr. A. W. Knox, Raleigh, and Dr. A. Cheatham, Durham.

Read the advertising pages, and when you write to advertisers mention the JOURNAL.



T. B. WILKERSON, M.D.



Chituary.

THOS. B. WILKERSON, M.D.

The community, Adoniram, Granville county, N. C., was made sad on the 12th July, 1894, by the death of its highly esteemed and much beloved physician, Dr. Thos. B. Wilkerson, who spent thirty years of his life in the alleviation of suffering humanity in this vicinity. There is scarcely a family within the radius of twelve miles of his home that are not indebted to him for his skill and faithful attention during the trying hours of illness, and who do not equally mourn his loss.

It would not be an exaggeration to say that, as a physician and surgeon, he had not only the entire confidence of the community, but also of his brother practitioners who knew him, as he was frequently consulted by them and made chief operator in a case of serious surgery.

His fame as a surgeon is not circumscribed by counties and States, for, indeed, some of his operations have surprised the surgical world, inasmuch as they were new and original, an account of which he gave in his contributions to the medical journals.

Dr. Wilkerson was born in Granville county, N. C., August 14th, 1837, and spent his boyhood and youth in the neighborhood of his birth-place.

He took his literary course at the University of North Carolina; after which he entered the University of Pennsylvania, from which Institution he graduated in art and medicine in 1857. He displayed especial genius in surgery from the beginning of his medical career, and grasped

every opportunity to perfect himself in this art.

He had just finished a special course in the Philadelphia Hospital when the war between the States came on, and he went to the front at the earliest opportunity, where he soon took rank with the prominent surgeons of the army. He was one of the surgeons in General Jackson's corps, and was one of the attending physicians during his last hours.

Dr. Wilkerson was a close student, and, besides keeping eminently posted on the lines of his chosen profession, was well-informed on the current topics of the day, and one of the most interesting conversationalists it has ever been the writer's privilege to know.

Recognizing the conspicuous moral worth of this splendid man, his value to the public, and the sad vacancy his death has occasioned, the entire community share with his bereaved widow her sorrow because of her great loss.

D. T. W.

DR. OSCAR GREGORY.

We regret deeply to learn of the death of Dr. Oscar Gregory, which occurred a few weeks since at his home in Oxford, this State.

Dr. Gregory was a Virginian by birth, studied medicine with distinction at the University of Virginia, and graduated from Jefferson College, Philadelphia. He served during the Civil War as Surgeon of the Third Virginia Cavalry, and after the close of the war practised his profession in Virginia and North Carolina. In all of his relations, both as a physician

and a thorough gentleman, his distinguishing traits of truth, loyalty and modesty won for him the esteem and trust of his fellows.

Dr. Gregory became a member of the State Medical Society in 1883, and

though circumstances have prevented his frequent attendance at the meetings of the Society, he has always manifested a deep and loyal interest in its welfare. He was fifty-six years of age.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

Matthews—The leave of absence by surgeon's certificate of disability granted Major Washington Matthews, is extended four months.

Shannon—Leave of absence for three months on surgeon's certificate of disability is granted Capt. Wm. C. Shannon, Assistant Surgeon U. S. A.

Fisher—Leave of absence for one month is granted First Lieut. Henry C. Fisher, Assistant Surgeon.

Lynch—The leave of absence granted First Lieut. Charles Lynch, Assistant Surgeon, is extended one month.

De Shon—First Lieut. George D. De Shon, Assistant Surgeon, will proceed from Fort Logan, Col., to Fort Douglas, Utah, and report for temporary duty.

Pothemus—Ordinary leave of absence for one month and fourteen days, in addition to the extension of leave of absence on surgeon's certificate of disability granted him, is granted Capt. Adrian S. Pothemus, Assist. Surgeon.

Robertson—The leave of absence for seven days, granted Capt. Reuben L. Robertson, Assistant Surgeon, is extended twenty-one days.

THE NAVY.

Three weeks ending January 12th, 1894:

Bradley, Michael, Med. Director, detached from duty as a member of the Naval Examining and Medical Boards.

Kidder, B. H., Med. Director, or-

dered as member of the Naval Examining and Medical Boards.

Parker, J. H., Surgeon; ordered to special duty in connection with the investigation of the Ford Theater disaster.

Stone, Lewis H., P. A. Surgeon, ordered to study the subject and make a report to the Department of the therapeutic value of antitoxin in the treatment of diphtheria and croup.

Farenholt, Ammen, Assist. Surgeon, detached from the U. S. R. S. "Vermont" and to Naval Hospital Norfolk, Virginia.

Kindleberger, C. P., Assist. Surgeon, detached from Naval Laboratory and Department of Instruction and to the U. S. R. S. "Vermont."

Cooke, Geo. H., Med. Inspector, in addition to present duties will attend officers on duty at League Island Navy Yard, but residing outside of the Yard.

MARINE HOSPITAL SERVICE.

For the sixteen days ending December 31, 1894:

Purviance, George, Surgeon, relieved from command of service at Philadelphia, Pa., and detailed as Medical Inspector of Immigrants at that port, Dec. 18, 1894.

Mead, F. W., Surgeon, directed to proceed to New York City, N. Y., for temporary duty, Dec. 27, 1894. To rejoin station (Washington, D. C.) Dec. 29, 1894.

Carter, H. R., Surgeon, granted leave of absence for twenty-four days, in lieu of leave granted November 20, 1894, Dec. 21, 1894.

Peckham, C. T., P. A. Surgeon, to inspect unserviceable property at San

Francisco, M. H., December 26, 1894.

Kalloch, P. C., P. A. Surgeon, to report at Bureau for special temporary duty, Dec. 29, 1894.

Bratton, W. D., P. A. Surgeon, placed on "Waiting Orders," to date from January 1, 1895, December 26, 1894.

Magruder, G. M., P. A. Assistant Surgeon, granted leave of absence for ten days, Dec. 22, 1894. Leave of absence extended five days, Dec. 31, 1894.

Perry, T. B., P. A. Surgeon, to proceed to New York City, N. Y., for temporary duty, Dec. 28, 1894.

Cobb, J. O., P. A. Surgeon, granted leave of absence for three days, Dec. 28, 1894.

Perry, J. C., P. A. Surgeon, to pro-

ceed to Philadelphia, Pa., and assume temporary command of service, Dec. 18, 1894.

Aydegger, J. A., Assistant Surgeon, granted leave of absence for three days, Dec. 18, 1894.

Blue, Rupert, Assist. Surgeon, to proceed to San Francisco, Cal., for duty, Dec. 18, 1894. Granted leave of absence for six days, Dec. 24, 1894. To proceed to Cincinnati, O., for temporary duty, Dec. 28, 1894.

Prochazka, Emil, Assistant Surgeon, granted leave of absence for twenty-five days, Dec. 17, 1894.

Cumming, H. S., Assistant Surgeon, leave of absence granted Nov. 17, 1894, cancelled Dec. 20, 1894. Granted leave of absence for seven days, Dec. 31, 1894.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

Dr W. H. Wakefield has removed from Winston to Charlotte, N. C., for the practice of his specialty—diseases of the eye, ear, nose and throat.

Drs. Albert Anderson, of Wilson, and W. T. Pate, of Gibson's Station, have gone to Washington, D. C., where they will take a course in bacteriology under Dr. Kinyoun.

The F. A. Davis Co. announce that they will issue, early in February, a companion book to "Psychopathia Sexualis." It will be entitled "Suggestive Therapeutics in Psychopathia Sexualis."

The *Atlantic Medical Weekly* is the successor of the *Rhode Island Medical Science Monthly*. This first issue of the weekly edition is gotten up in good style and promises much for the future.

Dr. R. H. Stancell, Jr., of Margaretsville, has been wintering at Southern Pines, that charming winter resort, situated in the midst of the pine forests of Moore county. The Doctor rolls a pill occasionally as a pass-time.

Physicians throughout the State will greatly miss the genial face of Mr. F. W. Hancock, the popular pharmacist, who so long represented Messrs.

Parke, Davis & Co. in this State. We learn that Mr. Hancock has accepted the office of Teller for the Bank of Granville, in Oxford.

Eugene Sandow, the strong man, gave a private exhibition recently before a few Cincinnati physicians. He is 5 feet 8 inches in height, weighs 165 pounds, measures 38 inches around the chest and has an expansion of *fourteen* inches. All agreed that he was a *freak* pure and simple, and not the result of careful, systematic and intelligent training and exercise.

The State of Georgia has at last succeeded in securing the passage of a medical practise law. It provides for three Boards of Examiners—regular, hœmeopathic and eclectic. Not as good as it might be, by a good deal, and still a good deal better than none at all.

Write to your representatives at Raleigh to use their influence to prevent the passage of the bill requiring our Board of Medical Examiners to grant licenses to all who have been licensed by other States. It would never do until the requirements in all the States equal those in ours.

Many members of the Class of 1879 Jefferson Medical College of Philadelphia, are desirous of having a class reunion on the occasion of the 15th anniversary of their graduation. Owing to changes, comparatively few addresses are known, and therefore this means is resorted to, with the hope that every member of the Class of 1879 who reads this notice will communicate at once with their class President, Dr. Philip R. Koons,

Mechanicsburg, Cumberland county, Pennsylvania.

E. B. Treat, Publisher, New York, has in press for early publication the 1895 International Medical Annual, being the thirteenth yearly issue of this eminently useful work. Since the first issue of this one volume reference work, each year has witnessed marked improvements; and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. The price remains the same as before, \$2.75.

The Treasurer's report shows the estimated assets of the New York Academy of Medicine to be \$467,339.14, and the running expenses about \$17,000 per annum.

A bill has been introduced in the Iowa Legislature providing that every proprietary medicine shall have printed upon its wrapper a statement of the ingredients of the preparation. Failure to do this is punished by either a fine of \$100 or six months in the penitentiary.—*American Lancet*.

Both of the legs of a young lady of Boston were amputated at the knee recently to save her life. They were poisoned by the dye in red stockings which she had been wearing.

St. Louis now boasts of an electric ambulance. It is built after the general style of the ordinary trolley car, and uses the tracks and trolleys of the various street-car lines. It is claimed to be a success.

The "sun-down" doctors of Washington City will no longer be allowed to work their "side line." These in-

dividuals, who, from lack of ability to earn a living by their profession strictly, obtain government positions, use their time, after office hours, in treating patients. Uncle Sam very properly thinks a business which is liable to call a man out at all hours of the night, is liable to unfit him for office work next day, so he has informed these s. d. d's that, to continue to practise medicine, is equivalent to a dismissal from the service.

Dr. Dunnigan died of diphtheria at the General Hospital in Buffalo, on Friday of last week, despite the use of antitoxin. After the first injection the patient's condition continued to grow gradually worse until the end came. The physicians at the hospital are loath to express themselves positively on the case, but the general opinion seems to be that the case had hardly been a fair test of the curative powers of antitoxin, as its administration had come too late, when the system had become so thoroughly impregnated by the ptomaines that the counteractive powers of the antitoxin proved inadequate.

The publishers of the *Index Medicus* announce that this valuable periodical is threatened with extinction on account of delinquency in payments and lack of patronage. The subscription price is ten dollars a year, and it will be possible to continue the publication if five hundred new subscribers can be enrolled. The amount may be sent to the publishers, Mr. George S. Davis, Detroit, Mich. It will be a great misfortune if the profession is deprived of this quick aid to medical research, and it is to be hoped that those who are interested in this index to the current medical literature will give their

substantial support to this very deserving enterprise.

THE NEW HEALTH OFFICER OF THE PORT OF NEW YORK.—The profession is generally well pleased with the appointment by Governor Morton of Dr. Alvah H. Doty to the position of Health Officer of the Port of New York, to succeed Dr. Jenkins. For many years Dr. Doty has been in the service of the Board of Health, and he has won distinction by the excellent work which he has done in all the different positions that he has held. He was born in Albany and studied medicine in Bellevue Hospital College, New York, from which he was graduated with high honors in 1878. He soon afterwards became attached to the Health Department, and after serving in various capacities was promoted in 1892 to be head of the Bureau of Contagious Diseases. He is also surgeon of the Ninth Regiment of the National Guard.—*Boston Med. and Surg. Jour.*

HONORS TO DR. ROUX.—Dr. Pierre Paul Emil Roux has been promoted to the rank of Commander in the Legion of Honor, for "exceptional services rendered to science and humanity."—*Ibid.*

It is announced that the Medical School of Columbia College, commonly known as the College of Physicians and Surgeons, is to profit by further benefactions at the hands of the Vanderbilt family, amounting to more than half a million dollars, to be used in enlarging the anatomical rooms, the Vanderbilt Clinic and the Sloane Maternity Hospital, besides additional sums to equip the new portions of

those departments. In some of its features, we have reason to think, the anatomical department is already quite equal to any in the world, and, with the fresh resources now to be placed at its command, we see no reason why it should not soon be unsurpassed in every respect. The school, as a whole, is admirable and steadily progressive.

As we have often said, it is not the school alone, or even the medical profession, that profits by such munificent gifts, but the whole community as well.—*Ibid.*

Dr. W. C. Steele has removed from Tulin and located in Mount Olive, which he will make his future home.

Reading Notices.

Mr. H. A. Kaysan, 34 Bond street, Brooklyn, N. Y., has an advertisement in this issue which will be interesting to you. His instruments and other supplies are of excellent quality, and he does not want to take from you *all* of your money in exchange therefor. Write to him for catalogue and prices.

After an attack of the grip the patient finds himself in a state of extreme weakness and prostration from which condition he is tediously brought to his former good health. Remedies which stimulate his exhausted nerves too vigorously do so at the expense of his general condition. Then comes the relapse. Syr. Hypophos. Comp. McArthur conveys to the tissues the revivifying and vitalizing agent phosphorous in its most oxidizable and assimilable form. Thus the true vitality of the nerve structure is restored by renewing the nutrition of the tissues themselves.

TERRALINE IN LA GRIPPE.—I read with unusual interest an article on "Some Experiments with Terraline" in the November number of *Food*, showing that your conclusions are correct, and that we have a valuable addi-

tion to the therapeutic list, I submit the following case:

Miss ———, a young lady of delicate physique, aged about 20, had a severe visitation of la grippe, in the winter of 1891, from which she apparently recovered only to have a severe recurrence of it during the following winter.

I felt satisfied that my patient had had broncho-pneumonia in her last experience with la grippe, and even at the time of my taking the case her lung was crippled with an effusion of catarrhal products into the lung tissue. As she had taken cod-liver oil, iron, quinine, strychnine, etc., without experiencing relief, I immediately put her on "Terraline," manufactured by the Terraline Company, Washington, D. C. In a short time she experienced improvement in the appetite, with a gradual amelioration in the cough. Under the continued use of "Terraline," she reported herself in December last as "nearly well."

Throughout the whole treatment only "Terraline" was given, and I would emphasize the fact that improvement speedily began under its use.—J. R. GARNER, M.D., Stanton, Ala., in the *Natinnal Medical Review*.

Advertisers and others will please scrutinize this issue of the JOURNAL.

Now is the time to subscribe for the JOURNAL—only \$2.00—semi-monthly.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, FEBRUARY 5, 1895.

No. 3.

Original Communications.

SURGERY ON THE WING—THREE SUCCESSFUL ABDOMINAL SECTIONS.*

By J. W. LONG, M.D., Professor of Gynecology and Pediatrics in the Medical College of Virginia, Richmond.

GENTLEMEN :—I offer you a short paper under the above title, not because I think *three* cases of abdominal section are sufficient to claim your attention, or because abdominal surgery can be done *better* "on the wing" than in a well-appointed hospital, but because the three cases aptly illustrate the *three most common conditions* for which abdominal surgeons are called to operate, and to show that a keen appreciation of aseptic surgery will enable a man to do good work anywhere under any circumstances. As I write this sentence the vision of Ephraim McDowell mounting his horse and riding from Lexington, Ky., to

near the Hermitage, Tenn., and with the aid of old Andrew Jackson removing an ovarian cyst, rises in my mind. I wish I could say, like McDowell, I feel the delectation of a fifteen hundred dollar fee in my pocket, but alas !

"Do I decry hospitals?" Never a time—I stickle for them; but must we let men and women die because forsooth they are not in a hospital?

I have been spending a short while at the old home place, Randlemann, N. C., and while here did, among other operations, the following sections :

CASE 1. — *Appendicitis*. — Frank H., married, aged 35 years, had suffered with "cramps and colic in his bowels" at intervals for three or four years. On Friday he had quite a severe attack. Saturday and Sunday he was better.

*Being the paper accompanying Dr. Long's application for membership in the American Association of Obstetricians and Gynecologists, at its Toronto meeting, September, 1894.

Tuesday he cut wheat all day. That night he was seized with an intense pain in the right iliac region, "drawing him double." His attendant, Dr. W. A. Fox, promptly diagnosed appendicitis. I reached home the following Thursday. The next day I was asked to see the case. I confirmed the diagnosis and urged *immediate operation*. My "kit" had not yet arrived from Richmond. But that man needed an operation, and, like the fellow in Texas who needed the pistol, he needed it *bad*. Dr. Fox and his associate, Dr. J. O. Walker, put their armamentarii together, and, putting the patient on a dining table, rapidly anæsthetized him. Cutting carefully down, I came upon the *appendix distended to the bursting point*; the pus could be seen through

together by sutures, thus virtually turning the stump into the cæcum. The abdomen was thoroughly irrigated, about half of the incision closed with interrupted sutures and a Mickuliez drain used. The recovery was uninterrupted.

This case is a fair sample of the *vast multitude* of appendicitis cases, which are occurring daily, and yet men, good men, too, shut their eyes and say: "I don't have cases of appendicitis." I do not believe *every* case (nor even half the cases) of appendicitis should be operated upon, yet, while holding this conservative view, I have numerous operative cases, and they all get well when I operate prior to the advent of general suppurative septic peritonitis.

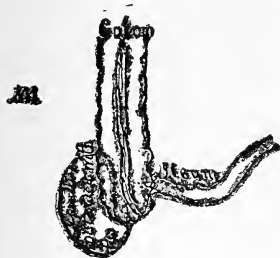


Fig. 1.

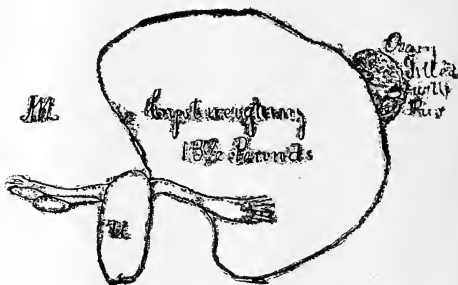


Fig. 2.

its thinned walls. A cough, a sneeze, suddenly turning over in bed, might have burst the sac and in a moment precipitated that man into a hopeless condition. The appendix was curled up behind and extended to the cæcum. Adhesions to the cæcum were dense, those to the anterior abdominal wall were more friable. With considerable difficulty the sac was enucleated. It was then ligated, cut off, the mucosa tied separately and the serosa brought

CASE 2—*Ovarian Tumor*—Mrs. C. H., aged about 35, two children, youngest ten months old. Noticed tumor three or four months after birth of her last child. It grew rapidly, and when seen by me her abdomen was the size of a seven month's pregnancy.

Diagnosis, multilocular cyst. Ovariectomy was done at the patient's home in Randlemann. I was assisted by Drs. Woolen, Fox and Walker, and

T. C. Walker, a member of our graduating class.

The operation possessed nothing unusual, except that I had failed to take my ovarian trocar with me, and rather than puncture the cyst with a scalpel, I made a long incision, notwithstanding the assertion by competent authority that it is better to puncture with a scalpel than to make a long incision. The recovery was perfect.

It may be said that ovariectomy is so simple that any tyro can do it; but what sane man is so rash as to assert that any but a master hand should do it?

CASE 3—*Endometritis, Chronic Interstitial Salpingitis, Retroflexion.*—Mrs. J. B., age 26 years, two children two and a half and five years old, no abortions, has not been well since the first

the tubes thickened and the ovaries enlarged and prolapsed. The retroflexion could be overcome bimanually, but there were evidently tubal and ovarian adhesions which would prevent the retention of the fundus in its normal position by non-operative measures. Here was a *condition*, rather than a disease, which justified and indicated an operation—a poor man's wife is bed-ridden; she suffers not intensely, but continuously; she ceases to be a helper as wife and mother, but is a burden to her family; the lesions present are, without exception, *progressive*; the sepsis inaugurated at her first labor and augmented at her second

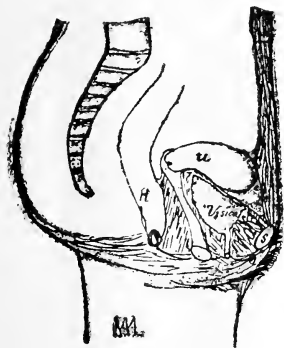


Fig. 3.

child was born, for three years she has been in bed most of the time and for three months all the time. Her case has been variously diagnosed and treated. Examination discovered the endometritis, the fundus retroflexed,



Fig. 4.—Piece of omentum removed from Case 3.

will continue to exert its injurious consequences till, if not already so, tubes and ovaries will be totally destroyed functionally, and largely so

organically, and inseparable adhesions shall bind the fundus in an abnormal position. An operation would remove the diseased tubes and ovaries and put the uterus into a position favorable for drainage; besides, the patient lives far away in the country, and could not go to a hospital, rather must continue at home in bed; besides, I was there with my "gun loaded."

Operation was done at once with no assistance save the attending physician, Dr. C. H. Lewis, who gave the ether, the husband and two neighbor women. The tubes and ovaries were removed and the *posterior* surface of the fundus attached to the *anterior* abdominal wall.

The recovery was uneventful, except for the formation of an intra-mural abscess, which did not materially retard convalescence.

This case is the only one of the three in which the results were not *absolutely*

as good as if the operations had been done in the best-appointed hospital in the land. Indeed, I have yet to meet the abdominal surgeon who does not occasionally have suppuration at the site of the abdominal incision, whether he operates in a hospital or "on the wing."

This class of cases is a very numerous one in my experience, and nothing relieves them like curettage, removal of tubes and ovaries and suspension of the fundus. The curettage was omitted in this case because of a lack of assistance and because I could see the patient only the one time.

As evidence of the *rapid progress* of gynec surgery, I will add that, if I had this case to operate on now instead of then (only a few months ago), I would certainly remove the *uterus* as well as the appendages. The reasons for this I will set forth in another paper.

NOTE ON MANAGEMENT OF CLUB FOOT.

BY. H. O. HYATT, M.D., Kinston, N. C.

It never rains but it pours. It has often happened in our experience that we get what might be called a run on a certain class of cases: Recently there has come under our care five club feet for treatment, no great number to be sure, if they had occurred in the practice of a specialist, but enough to tax our ingenuity as to the best manner of managing them.

Our method, although very simple, has proved highly satisfactory. But simple as it is, it did not come like an

inspiration, but was the result of painstaking care.

We have often experienced trouble in the management of the foot, whenever having a fracture near the ankle joint we wanted to put the limb up in plaster of Paris. The assistant, by grasping the heel and front of the foot, always had his hands in the way while we were applying the bandages, and afterwards a great deal of trouble in holding the limb straight and stiff until the plaster was well hardened,

The hands of an assistant on the heel and front of the small feet of our patients would leave us no space to apply the plaster after our usual method.

In preparing our bandages we select ten yards of common four-cent homespun, which is washed with soap to remove all the oil from the cloth—unless this is done the plaster will not readily stick to the bandage, the oil in the staple preventing its wetting readily. The bandages are from one to one and a half inches wide, the size of the foot determining the width of the bandage to be used.

We prepare strips of thin board—cigar-box material answers the purpose. This is cut the width of the foot, being made narrower for the heel. We formerly used plaster specially prepared for dentists, but after a trial find that the ordinary plaster, if baked in a stove to drive out all the water, will set just as quick. This we are in the habit of keeping in an old cosmoline can which has a screw top and keeps out all moisture.

The child, having had its feet washed with soap and water, is put under the anesthetic and the feet again washed, this time with a bichloride solution, one to one thousand, and a sterilized towel placed across the table under the feet. The contracted tendons are cut.

Taking up the splint, with the heel end from you, it is wrapped with the bandage, leaving an inch of the smaller end exposed. The wrapping is done from left to right, covering about two and a half inches. The splint is now applied close to the bottom of the foot and extending an inch beyond the heel. The foot is bandaged to the splint, the ends of the splint being held by the assistant, the bandaging is extended

five or six inches up the leg and pinned; a pin is also placed in the roler, which prevents it from coming undone.

About a teacupfull of plaster is placed in a plate, two or three tablespoonfulls of water added and the whole rapidly worked with the fingers, making stiff mortar. The assistant, grasping the splint by the free ends, twists the foot as near to the normal position as possible and holds it there. The plaster is spread thick and smooth over the foot ankle and for five or six inches up the leg. The bandage is now unpinned and applied over the plaster and pinned again. The surgeon's hands are now washed and mortar again made as before. The bandage is placed over this coat of plaster and left. The attendant holds the foot rigidly in position for ten minutes. This gives the plaster plenty of time to set. The end of the board extending beyond the toes, which should be left exposed, and beyond the heel, is trimmed off with a pocket-knife and the whole covered by a large stocking.

This method of using plaster is not the usual one. Our first knowledge of plaster as a splint came from a paragraph in a medical journal when plaster was first used, about twenty-two years ago. In the paragraph referred to the method of preparing the bandages was not alluded to, and a case soon presenting itself, we put it up after the manner described above. It answered our purpose, and we have never seen it advantageous to change. The materials are always at hand.

The advantage of a ten-yard bandage in putting up club feet is that it makes it easy to take off—as the bandage unrolls the plaster attached readily breaks and comes with it.

AN EPIDEMIC OF BOWEL OBSTRUCTION.

BY R. J. GRIMES, M.D., Bethel N. C.

On the first day of August, 1893, I was called to see James W——, who was suffering with all the symptoms of the above illness of four day's standing. On the following day I operated and found the gut quite discolored.

Obstruction was relieved and in seven days the patient was well.

On the 15th day of September, 1893, I was called to see Samuel C——, æt 13. Found bowel obstructed four days. On the following day, with the assistance of Drs. Hargrove and Nelson, I made the usual incision in median line; found ileum entirely obstructed with grape seed eight inches from cæcum. The ileum below the grape seed was very much discolored. I relieved the obstruction, followed the seed to within an inch of the ileo-cæcal valve, closed the abdomen, and in twelve days patient was well. On the day following operation patient had violent diarrhœa.

September 31st, 1893, I saw Bud B——, æt 15, suffering same as aforesaid patient. Found circumscribed tumor in the right iliac fossa. I soon relieved the obstruction, but the hectic symptoms did not improve. I also found the tumor would change its location from right to left side. On October 5th I operated with the assistance of Drs. Brown and Nelson. I cut through the abdominal wall and found a very large pus sac occupying the entire lower portion of the abdomen. The peritoneum was entirely separate from all its attachments below the umbilicus. The pus sac was about one-fourth filled. Abdomen was closed,

leaving in a drainage tube. In 21 days the boy was well.

October 10th, 1893, I cut through the abdominal wall of Richard M—— and relieved him of about one quart of pus surrounding his kidney. The patient recovered in a short time.

On December 10th, 1874, I was called to see a female patient of Dr. Jenkins', near Conetoe, and found bowel obstruction of six day's standing. Her condition was so serious that it was apparent that she could not live more than twenty four hours. I therefore operated by lamp-light with the assistance of Dr. Jenkins, and found the bowel bound down with bands, some of which were eight inches long and as large as my finger. I divided the bands by tearing and did not ligate. They were at least twelve in number.

In cutting through abdominal wall there was not sufficient blood to discolor a handkerchief. The hemorrhage from the bands was not severe. The bowel was discolored and very much distended above the obstruction. The wound was closed. There was no further pain or vomiting, and I understand the patient is now well.

During this space of time I saw other patients suffering the same as the above, but too late to relieve, the patients being in a moribund state.

I am quite sure that a large per cent. of patients with bowel obstruction die yearly, their physician having mistaken their disease for bilious colic or some other trouble. I do not think that the books are sufficiently explicit in regard to this disease as it occurs in our country.

I have not seen stercoraceous vomiting in a single case that I have had, and have discovered no tumor except in one case of appendicitis. In fact, there is no vomiting after the first day or two; but you will find instead a regurgitation of a bluish discolored liquid with coffee grounds sediment, which comes up with but little effort. The abdomen is generally smaller than

usual, but tympanitic. This you can readily understand when you remember that the large intestines (being below the obstruction) are collapsed. Notwithstanding the upper bowels are very much distended, they fail to enlarge the abdomen. They adapt themselves, however, over the entire abdominal cavity and cause tympanitis.

IMPERFORATE ANUS.

By J. R. HESTER, M.D., Prospect Hill, N. C.

On the 30th of October, 1894, I delivered Mrs. M. B., primipara, of a fine, plump male child of medium size. Upon examination I discovered that the child had no anus. The penis was of unusual size with a very large urethra. The penis measured about an inch in length upon the upper surface, the under surface being attached to the scrotum. There were two well developed testes. The under surface of the scrotum presented upon the left side a third apartment, apparently for the reception of a third testicle, but the sack was empty. It has, however, since filled up with what I believe to be fecal matter.

During the first few days after the birth of the child it passed the contents of both bladder and bowel through the urethra at the same time. When about one week old, it began to pass the urine and feces separately, the urethra, however, still acting as the passage-way for both.

The child continues to do fairly well, the bowels acting twice daily, on an average, and the bladder about as frequently as in other children of the same age.

Dr. Murphy and Robinson have both seen the child. Its parents live in

Orange county, North Carolina, about two miles from Prospect Hill.

CANNABIS INDICA.—Mackenzie (*Se-maine Medical*, No. 14, 1894) speaks highly of cannabis indica in all forms of cephalalgia. He has found it act favorably even in the severe headache attending cerebral growths. In chronic uremia, where opium is contra-indicated, it is especially serviceable. He has found the remedy to be almost a specific for that continuous form of headache which begins in the morning and lasts all day. In these cases the pain is generally dull and diffuse, but marked by occasional exacerbations. While it is rarely severe enough to interfere with occupation, yet it constitutes a source of constant annoyance to the patient. In such case the author administers morning and evening one-twelfth to one-half grain of the extract in pills. If these doses are not sufficient, he gives one grain in the evening and one-half grain in the morning. In very obstinate cases the dose is still further increased, the larger dose always being taken in the evening, until relief is afforded or toxic symptoms become manifest. — *University Medical Magazine*.

Society Reports.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Seventh Annual Meeting, held in Charleston, S. C., November 13, 14 and 15,
1894.

[Continued from page 13.]

Dr. William Perrin Nicolson, of Atlanta, Ga., presented a paper upon the report of a severe case of nævus which was cured by the use of galvanopuncture. The case was one of a large growth occupying the groove from the angle of the jaw up to and covering a portion of the ear and extending out upon the cheek, the entire tumor being almost the size of a hen's egg.

Dr. Nicolson formulated the following conclusions as having been reached in the long period covered in the treatment of this case :

1. That while this treatment may not be applicable to all cases, in many of those that are reached by difficult dissection and are subject to dangerous hemorrhage, as well as an unsightly looking scar, this is undoubtedly to be preferred to any other surgical proceeding. The time required in a cure is more than balanced by the entire preservation of the skin and the absence of danger from operative work.

2. That as to the quantity and quality of the current to be employed, as many as six cells of a zinc-carbon battery may be sufficient in small growths, while twelve cells of the same is perhaps the maximum to which it should be carried if the current from the positive pole alone should be employed

3. The method of applying needles.

Various forms of needles may be employed, but the ordinary steel needle gives equally satisfactory results, as the eschar produced in the skin at the point of entrance is not sufficient to amount to anything, and the needles can thus be changed at each sitting. That only one of them should be inserted into the tumor, while the negative pole should be attached to a sponge electrode moistened with a soft solution and placed upon some indifferent point, care being taken to remove it from point to point in order to prevent blistering the skin.

4. Method of attacking the tumor. Better results are obtained by passing the needle in from the periphery of the growth on a line horizontal with the skin and in directions radiating from the circumference towards the center. Several of these punctures should be made at each operation. The length of the entire sitting should not extend to more than twenty minutes or half an hour, while intervals of two to three weeks, or longer, should be left between operations to know whether there may not be a progressive shrinking away of the tumor.

5. As to the method of cure. The author thought that several elements entered into attaining the result, of which the coagulation of the blood was

one, and perhaps the least. The two remaining elements were the subsequent contractions of the small eschar produced in radiating lines from the tumor and the effect of the current upon the vaso-motor nerve supply.

He felt sure that a thorough trial of this method as to the settling of the various points considered, would result in its adoption in the treatment of perhaps a large majority of those cases where we have a large elevated blood tumor with which to deal. He also believed that perhaps pricking the surface with the needle attached to a positive pole of battery might result in a series of small scars which would result in removing the ugly port-wine marks so common in this trouble.

Dr. Joseph Price, of Philadelphia, followed with a paper entitled *Operation for Complete Perineal Laceration*, in which he said that there are many men who, essaying to be authorities on the surgical diseases of the major order, have no conception whatever of injuries of the perineum and cervix so far as their intelligent repair is concerned. Indeed, there are many with a large obstetrical practice who labor under the delusion that they have never ruptured a perineum, and that all their patients have entirely normal perinea. This misconception is due to improper teaching more than to any other cause. Perineal lacerations, unless extending through the skin to or through the sphincter, may escape detection unless by thorough digital examination. All these tears should be approached as distinct surgical lesions to be repaired in the line of their anatomical destruction, and not as cosmetic operations, whose object is to obtain superficial appearances without regard to perfec-

tion and utility. Heaping up of tissue outside the lines of resistance and tension, or mere thickening of mucous membrane and skin does not make a true perineum, neither does a set of outside sutures, however much they may draw the parts together, afford any anatomical counterpart of a perineum. From this basis all the so-called outside flap-splitting operations for perineal tears are only puckering operations, bringing parts within the sutures that have never been severed, and in many cases taking them out of their proper relations. Big sutures, heavy ligatures, clumsy instruments have no more place here than in other surgery. The ordinary short strong sewing needle fills the bill exactly in most cases, although the Emmet stray-fine short needle for general use is preferable. Silkworm gut or silver wire is the preferable suture. The Emmet operation, as originally suggested and modified afterwards by its distinguished deviser, is the foundation for all successful operations on the lacerated perineum, either with or without sphincter tear.

After the reading of Dr. Price's paper, Dr. Engelmann, Vice-President, took the chair, and President Kollock delivered his Annual Address, in which he first thanked the Association for the honor conferred upon him. He then alluded to the death of Drs. W. T. Briggs, of Nashville, and A. B. Miles, of New Orleans. Dr. Briggs's life had been one of usefulness. He had done excellent and remarkably brilliant work, and had achieved an enviable reputation. Dr. Miles, who had been made Professor of Surgery in Tulane University, was a man full of youthful activity and manly vigor, who, by

patient study and diligent research, aided by a brilliant intellect, had won for himself a high position in the profession and in the estimation of his fellow men. To know him was to admire and love him. "His life was gentle and the elements so mixed in him that Nature might stand up and say to all the world, This was a man."

While in all branches of gynecology good progress had been made, he noted with pleasure that surgery had had its triumphs. Many reports of cases show enlarged experience and continual improvement in the treatment of appendicitis, hernia, intestinal obstruction, and many other ills that flesh is heir to.

Dr. Bedford Brown, of Alexandria, Va., read a paper on—

Observations on the Action of Chloroform on the Functions of the Human Brain and Spinal Cord, as Witnessed in Extensive Injuries of the Cranium and Brain.

Dr. Brown cites the history of two cases of extensive compound comminuted fracture of the os frontis and serious injury and destruction of a portion of the frontal lobes of the brain as the basis of his paper. One of these cases of injury was caused by the kick of a newly-shod horse, the other by a spent grape-shot in battle. The subjects of both of these injuries retained perfectly their powers of consciousness and sensation.

The history of the first case was published in the October number of the *American Journal of Medical Sciences*, 1860, and occurred in the summer of that year. The fracture in that case involved a large portion of the os frontis. The fractured bones were driven back into the substance of the brain quite an inch in depth, lacerating

the frontal lobes extensively. There was a loss of about two tablespoonfuls of brain. During the operation, which lasted more than an hour, the patient was placed under a compound of chloroform three parts, ether one part, four different times. Through this large opening in the skull the brain could be seen perfectly and its varying change of action under chloroform could be observed perfectly. The invariable action of the anesthetic was to suppress hemorrhage, to quiet cerebral pulsation and to positively reduce circulation in the brain and arterial tension. These peculiar effects were observed as many as three or four different times. When the patient was threatened with collapse from chloroform, stimulants injected in the rectum produced increased circulation and arterial tension in the brain promptly.

Any struggling, mental excitement or resistance while inhaling chloroform, caused marked increase in cerebral circulation and pulsation with increase of hemorrhage.

The second case was that of a Confederate soldier, who in battle received a spent grape-shot in his forehead, causing an extensive compound comminuted fracture of the os frontis, driving the fractured bones back more than an inch into the frontal lobes. The wound in the skull was quite two inches in diameter and more than an inch in depth.

This patient was subjected to chloroform three times during the operation, which lasted an hour. The action of chloroform on the functions of the brain in this was similar to that in the first. When under full anesthesia, each time the cerebral hemorrhage ceased, the cerebral pulsations dimin-

ished to a mere tremor, and the arterial circulation was markedly reduced. This occurred three different times during the operation.

The action of alcoholic stimulants resorted to in this case to prevent collapse from chloroform increased the cerebral pulsations and circulation in a positive manner.

Hydro-pyonephrosis; Successful Removal of a Forty-pound Tumor of the Kidney, by Dr. Joseph Taber Johnson, of Washington, D. C. The patient was 65 years of age, and had inherited and possessed until five years ago a remarkably good constitution. At this time a lump appeared in his right side in the region of the liver, and was supposed, up to the date of the operation, to be caused by enlargement and abscess of that organ. This lump gradually increased in size and the patient had gradually lost flesh and strength until the date of the removal of the lump, when he could not have weighed more than 80 pounds. At no time did he suffer from pain, and only a few weeks with fever.

There were several points of interest in this case, viz: failure of a number of good men to make a diagnosis, though the patient was under observation for nearly five years. Failure of repeated examination of the urine to detect the slightest evidence of disease of the kidney. The only explanation the writer suggests is that the disease at the time of analysis and subsequently had so destroyed the function of the kidney as to prevent the escape of any urine at all, and that the specimens examined all came from the other organ, which fortunately was healthy. Failure of such large quantities of foul-smelling pus to produce more

sepsis; absence all through the history of pain or fever; the median line incision; the separate ligation of the renal vessels and the ligation and dropping of the ureter.

The writer is aware that the lumbar incision is preferred by nearly all nephrectomists, and that they often bring out the cut end of the ureter and faster it to the abdomen.

While the lumbar incision may be best in small tumors and otherwise disease of kidneys, it certainly could not have succeeded, the author believes, in a case of the magnitude of the one here reported, not only on account of its great size, but also because of its being so extensively adherent to the omentum and abdominal wall. The colon had to be carefully separated from the anterior surface of the tumor.

Dr. W. L. Robinson, of Danville, Va., read a paper entitled Report of Cases.

He reported two cases of gunshot wounds of the abdomen, lacerating the liver and bowel. In neither case were the symptoms commensurate with the injury; neither shock, hemorrhage nor pulse portrayed the necessity for operation. Yet, in view of the 92 per cent. mortality from gunshot wounds of the belly without operation, he did not hesitate to operate. The first case came so near dying on the table, and his light being imperfect at 12 o'clock at night, he only found the liver wound, failing to find the hole in the posterior border of the hepatic flexure of the colon. The patient died in three days.

His second case was operated on promptly, and the injury in the transverse and descending colon was promptly repaired with the Murphy button. The

man was on a spree and had had no action from the bowels for three days. The doctor pressed out much fecal matter, but said he should have taken more time and ruptured the bowel as far as practicable. For two days no unfavorable symptoms presented themselves, but on the night of the second day distress from tympanites and pain began. He suggested to his associates the propriety of reopening the abdomen, but enemata and grain doses of calomel were tried. This, the author considered, was his fatal mistake, for the waiting of ten hours had lost him the chance of a life-saving operation. He opened the abdomen and with medium-sized trocar emptied the bowels of gas, but exudative lymph was manifest on bowels, and obstruction of button by feces existed. The button held its tissues firmly, and no leakage had occurred. The cavity was washed out, but the patient died in ten hours of shock.

Dr. George Ben. Johnston, of Richmond, Va., followed with a paper on Movable Kidney.

At the outset the author emphasized three propositions: (1) Movable kidney is extremely common. (2) It is capable of producing very distressing symptoms, and in many instances is a menace to life. (3) It is curable by a simple and safe operation.

The author's own experience with movable kidney from a surgical standpoint extends back a little more than three years. Prior to the first nephrorrhaphy, which he performed in May, 1891, those cases he had met with were given little or no thought. Since the date mentioned he had looked with more interest on his cases, and has come to marvel at the frequency

of the malady. He has examined a limited number of persons likely to be the subjects of movable kidney since his first operation for its relief, and in a comparatively small number of subjects he has encountered twenty-seven cases. Edebohls, who has studied five hundred cases, fixes the rate at one for every five or six women examined. Linder gives about the same rate. Osler makes no statistics, but mentions it as a common occurrence in his hospital wards. The records of these observers and Dr. Johnston's cases justify the assertion that it is a common malady.

It occurs more often in women. He had never seen one in a male subject. Age is a factor in its production. His own cases have been in subjects varying in age from 20 to 35 years. In only one instance has he seen it in a woman over 40. Both kidneys may be movable at the same time. The right kidney is the one affected in the preponderating majority of the observed cases. This is accounted for by the relation of the kidney to the liver on this side.

Two anatomical facts help to explain the preponderance of the right over left kidney displacement. (1) The greater length of the right renal artery. (2) The firmer attachments of the left kidney. The author has twice seen a movable kidney follow obstruction of the ureter. It happened that both of these cases were on the left side. The increased weight of the kidney due to accumulated urine and congestion must have played an important part in the etiology of the dislocation in these two cases.

In many cases of movable kidney there are no symptoms. In others the

symptoms are extremely distressing, producing great mental disquietude as well as intense physical suffering. In a proportion of cases the symptoms are grave. Torsion of the ureter is common, partial occlusion by bending is not uncommon, inducing a distension of the pelvis by dammed-up urine. Hydronephrosis may follow. Calculus is thus invited by reason of poor drainage. Apart from tumors of the kidney itself, the condition most likely to be mistaken for movable kidney is distended gall-bladder.

Nephrorrhaphy is not indicated in every case of dislocated kidney, but

only in such cases as manifest distressing or dangerous symptoms. When a gastro-intestinal disturbance impairs the general health, when nervous symptoms are severe, when the dragging abdominal pains are constant, when disease of other organs is simulated, when hydronephrosis is threatened, when one or more attacks of torsion have occurred, the operation is made imperative.

The author then outlined his method of operating on movable kidney, and closed his paper with a report of seventeen cases.

To be continued.

Selected Papers.

A CLINICAL STUDY OF EMPYEMA IN CHILDHOOD.

By W. E. HUGHES, M.D., Ph.D., Philadelphia, Pa.

[*Continued from page 34.*]

The physical signs upon which we rely for a diagnosis between empyema or any other pleural effusion and pneumonia in a child are, of course, the same as those we have at our command in an adult, but while in an adult this diagnosis is easy and sure, in childhood it is generally difficult and occasionally impossible. The physical signs of effusion may be so clearly marked as to indicate at once the nature of the case. Most notably is this true where we can demonstrate movable dullness or displacement of neighboring organs, though there are many cases where, while these signs cannot be elicited, the others are still distinctive. When,

on the other hand, they are not clearly marked and simulate almost perfectly those of pneumonia, the one on which most reliance can be placed for a diagnosis is the breath-sound. In effusion the tubular breathing differs slightly, it is true, but significantly from that of pneumonia in being sharper, more metallic, more superficial, but not so loud, there being an accentuation of character at the expense of volume. Râles are next in importance. When they are present they are more metallic and distant, they give the impression of being conducted from a distance. The voice-sound, too, is of some importance, it is a trifle more

metallic and higher pitched than in pneumonia. Tactile fremitus cannot be relied upon at all in a young child as a diagnostic sign. It is difficult to elicit it satisfactorily enough for accuracy, and when it can be elicited it is very likely to be as prominent in empyema as in consolidation.

As between serous and purulent effusion the diagnosis is even more difficult, and I have been accustomed to rely here upon the history of the case and the general appearance of the chest rather than upon the physical signs. In acute cases the history will furnish no definite diagnostic hints, but where the fluid has remained unabsorbed for some time, and, more important, where there has been marked deterioration of general health, a diagnosis of empyema is to be made, and this is strengthened, if, in addition, there is present an irregular fever with sweating. Of more moment still than the history is the appearance of the chest. In empyema the affected side looks rather fuller, the superficial veins are more prominent, and, most distinctive of all, there is often a peculiar glossy appearance of the skin, which indicates pus. This is not an edematous condition of the chest-wall, but resembles edema closely in appearance, though the tissues do not pit on pressure.

Physical signs, as was said, are unreliable in the diagnosis of the nature of the effusion. The S-shaped line of the upper limit of the effusion, and the freedom with which the area of dullness changes its position with the change of position of the child are dependent on the amount and tension of the fluid, and not on its character. Bacelli's sign, whispering pectoriloquy,

is not reliable. Whether it be absent or present, probably depends altogether on the tension of the fluid. In two of the cases cited below this whispering pectoriloquy was present, even though the effusion was thick pus. In adults I have had the same experience; here, too, it is not to be relied upon.

As the diagnostic symptoms and signs may be so indefinite, it becomes necessary to make in many cases an exploratory puncture. This in a child can be easily and harmlessly done. Even though the needle may be plunged into lung-tissue, no danger is to be apprehended. This exploratory puncture is often our only means of making a definite diagnosis between pneumonia and effusion, and oftener still the only way we have of determining the kind of fluid present. It may be made with an ordinary hypodermic syringe, but better with an aspirator, so that if fluid be found its immediate evacuation may follow. As has been said, an empyema is sometimes formed on a basis of a simple serous effusion, so when the progress of the case is not satisfactory, a series of punctures must be made extending over a series of days, and sometimes such persistence will be rewarded by the eventual discovery of pus. This empyema must not be attributed to the exploratory punctures, for if made with proper precautions they are absolutely harmless and incapable of producing pus.

The diagnosis of the variety of empyema can be made with certainty only by a microscopic examination of the pus, but there are some clinical facts often prominent enough to warrant a tentative diagnosis in the absence of opportunity to make such examination. *Pneumococcus empyema* usually fol-

lows or accompanies a pneumonia, is acute in its character, with prominent but not very serious symptoms. It has a tendency to perforate the lung and evacuate itself through a bronchus. The pus is creamy and thick. Tuberculous empyema is essentially latent, slow in its accumulation, may be irregularly localized and may eventually perforate the parietes. Its pus is thin and often flocculent. Empyema due to pus organisms is frequently latent, or when acute has prominent and grave symptoms. It is not likely to perforate. It frequently follows the specific fevers or some demonstrable pyogenic lesion. The temperature may be remittent. The pus is thinner than in the first variety, but thicker than in the second.

The following cases are introduced because they have recently been under observation, and because they illustrate quite well the course and termination of metapneumonic, the commonest form of empyema:

Case 1.—Girl, aged 7 months. Five weeks before coming under my observation the child, well nourished at the time and in remarkably good health, had been taken suddenly with a markedly febrile attack attended with severe general symptoms, constant harassing cough and very rapid breathing. The diagnosis made at this time by the attending physician was pneumonia, and, from what I was able to gather from the history of the case, as detailed by the parents, I have no doubt was the correct one. The subsequent history is necessarily indefinite, but with all its indefiniteness still remarkably characteristic of pneumonia. At the end of a week the symptoms ameliorated, the temperature declined, but

there was at no time a perfect restoration to health. Soon what little improvement had been gained was lost, emaciation progressed, appetite failed, and, finally, in the eyes of her parents, the child was more seriously ill than in the initial attack. When I first saw her she was extremely emaciated, appetite poor, stomach not always retentive and bowels often irregular. Respirations were shallow and rapid, ranging from 60 to 70 in the minute with fine play of the alæ nasi. The heart's action was quick, weak and labored, the apex beat in the fifth interspace, just outside the nipple line. The general surface was a little cyanotic and the finger-tips beginning to be clubbed. The temperature was irregular, occasionally normal, but oftener above, sometimes reaching 103° F. There was absolutely nothing regular about the temperature curve, the exacerbations occurring quite as frequently in the morning as at any other time, and on alternate days there might be almost apyrexia and sharp fever. The right chest was distinctly fuller than the left and showed less movement. The interspaces were thought to be somewhat prominent. The cutaneous veins were certainly fuller than those upon the opposite side, and there was a general glossy appearance of the skin, though there was no edema. From apex to base this side was perfectly dull, with a distinct sense of doughy resistance, tactile fremitus was poor and breathing tubular. As well as can be gotten in a child of this age the voice-sound, as determined by the cry, was that of a nasal pectiloquy, and when the cry was almost suppressed and partly sobbing, what might answer to whispering

pectoriloquy could be plainly heard. At no point could any signs be located which might serve to indicate beneath, the existence of a compressed lung. It was impossible at first to gain the consent of the parents to aspiration, but this was at last obtained, and, with the assistance of Dr. W. S. Carter, I drew off seven ounces of thick, creamy-yellow pus, blood-stained at the last from laceration of adhesions by the end of the canula. The child's condition immediately before aspiration was interesting; we were assured positively by the mother that almost twenty-four hours previously the child had become suddenly and distinctly easier, and that this improvement had been coincident with the establishment of a loose cough with free expectoration. The inference, of course, was that the empyema had ruptured into a bronchus and was discharging. Careful physical examination, however, failed to show any change in the physical signs, and the results of the aspiration most definitely negated any communication with a bronchus. It is interesting, too, to note how the lung—compressed absolutely as it must have been for at least a month—behaved after aspiration. Immediately after all the pus had been withdrawn the lung filled fully the pleural cavity, everywhere a good respiratory murmur could be heard replacing the previously existing tubular breathing, and over the whole side was a clear tympanitic percussion note. For a few days after the aspiration fluid, presumably pus, slowly reaccumulated, then it was slowly absorbed, and a month afterwards the lung was apparently perfectly normal. From the time of the aspiration the temperature was normal and the bodily

condition of the child steadily improved.

Case 2.—Girl, aged 4 years. Seen in consultation with Dr. F. H. Milliken. Two weeks previously she had had a mild attack of pneumonia involving the lower lobe of the right lung. The symptoms were not at all grave and the physical signs rather those of broncho-pneumonia. There were spots of imperfect consolidation scattered through lung-tissue apparently unaffected. The temperature fell by crisis at the end of a week, and for a few days she was apparently rapidly returning to perfect health, when the original symptoms returned. When I saw her her fever was moderately high and continuous. There was irregular but not marked sweating; face a little dusky; cough constant; dyspnoea very marked. Complained greatly of pain in the left side, which was tender to the touch. Left chest was dull from apex to base; breath-sounds tubular; whispering was pectoriloquy. Twenty ounces of thick, creamy pus were withdrawn immediately, with prompt relief to the symptoms. Within three days the pleural effusion had partially reaccumulated, there was still some fever, but the symptoms were nowise as urgent as before the aspiration. At this time she passed out of Dr. Milliken's care and the subsequent history is indefinite. She is said to have been ailing for some weeks, and at one time to have expectorated large quantities of purulent matter. However, she eventually made a good recovery without any further operative interference.

Class 3.—Boy, aged 6 years. Two weeks before coming under observation had what was said to be grippe, but what was really, in all probability,

from the symptoms, a mild pneumonia. He did not recover from this, and when I saw him was emaciated, had a distinctly hectic temperature, coughed incessantly, with little expectoration, and complained bitterly of pain in the right side. Physical examination showed over the lower half of the right chest immovable dullness and absence of breath- and voice-sounds. Tactile fremitus over the dull area was exaggerated as compared with the corresponding area on the left side. Exploratory puncture showed pus. The parents refused to permit aspiration. A week later he began to expectorate freely large quantities of pus containing pneumococci. Coincidentally with this there was a distinct improvement in his symptoms, and a week later a marked decrease in the area of dullness could be demonstrated. His improvement progressed uninterruptedly, and in six weeks from the first purulent expectoration he was apparently perfectly well. At this time there could be detected nothing wrong in the right lung.

Case 4.—Boy, aged 2 years. Had a severe attack of pneumonia with complete consolidation of the upper lobe of the right lung. Was discharged at the end of ten days apparently perfectly convalescent.. Two weeks later, when I was again called to see him, there was dullness throughout the whole of the right chest, tubular breathing, distant metallic râles, exaggerated tactile fremitus. The right chest was enlarged, the veins dilated, the skin glossy and a little dusky. Exploratory puncture showed pus. The general symptoms were not pronounced. The child was evidently not well, was peevish and fretful, but

walked about and made occasional attempts to play. There was neither fever nor sweating. The parents refused aspiration, and the child was placed upon supporting treatment, with occasionally a sedative to relieve the cough, which was not very troublesome. For some months there was no change in the general condition nor in the physical signs. Then a gradual improvement began, and the fluid in the chest lessened. Nine months after the beginning of the empyema the fluid had apparently been all absorbed, and the pleura was much thickened generally, and the breath-sounds so harsh as to suggest quite an extensive fibroid change in the lung. During the next four months the lung gradually cleared up, till at the end of that time the respiratory murmur was perfectly normal, and there was no evidence of any thickening of the pleura.

In these cases will be noticed two methods of the termination of empyema. The first is by penetration of the lung and evacuation through a bronchus, and is shown in *Case 3* and possibly in *Case 2*. This method is unquestionably more common in childhood than in adult life; but why this should be so cannot be determined, nor is the exact process by which it is accomplished at all understood. That discharge through a bronchus is in some manner connected with the nature of the effusion is evidenced by the fact that this event is much the most common in metapneumonic empyema. In fact, from the frequency with which it occurs in this form, this would seem to be here the normal termination of empyema. The amount of effusion seems to have little to do with it, small localized empyemas not

infrequently terminating thus. It can easily be supposed that the pneumonic lung, which has given rise to the empyema, will, by virtue of its condition, yield more readily to the entrance of pus. Or the reason may still lie in the condition of the lung and yet be a purely mechanical one, the consolidated portion being incompressible may offer an easy outlet. This attempt on the part of nature to heal not always results in a perfect success, and is too often abortive. When, in addition to pneumococci, pus organisms are present in any considerable number, extensive destructive lesions of the lung may be set up by their introduction into its tissue, vitiating the good done by the liberation of the pus. If the organisms be not inimical to the health of the lung, a small fistulous tract may be formed, through which the pus is forced principally by coughing, and the lung, readily expansible as it is in childhood, easily follows the lowering fluid till it finally is closely reapplied to the parietes throughout the whole pleural cavity, and a cure results. During this process air is rarely admitted, the pressure of the effusion more than counterbalancing that of the inspired air. The other method of terminating referred to is absorption of the pus. This must in itself be an event of great rarity, but that it may occur is proven by the case cited. While this termination is of little importance as a curative measure, yet secondarily in connection with other processes it becomes of great service. From the nature of the pleural cavity it is practically impossible that it should be thoroughly drained except after the lapse of such time when the assistance of the expanding lung is brought into

play. But if we grant that the contents of an empyema may be spontaneously absorbed, it will at once be seen why a single aspiration may be successful, or an empyema may heal a very short time after the perforation of a bronchus. The pus is here by no means all drained off. Merely enough is abstracted to permit of the rapid absorption of the remainder. So we get a more hopeful prognosis, but at the same time we must not permit ourselves to rely too much upon this assistance of nature. The third method of cure, and one which must be spoken of, as on it is based all operative procedures, is by perforation and evacuation by channels other than the lungs. The most common point of perforation, and fortunately the one most likely to lead to cure, is the chest-wall. Many other points of perforation have been recorded, but none of them are favorable, and little likely to lead to fortunate results. In childhood, when perforation of the chest-wall takes place, this usually occurs high up, often in the second interspace, and yet the discharge of pus takes place at this point as freely as though it were at a point more favorably situated for free drainage, showing that the pus is really forced out by the expanding lung and not drained away. That this perforation is not more frequently followed by perfect cure is due to the condition of the lung and to the variety of empyema in which it occurs. If the lung, in addition to being collapsed, is partially consolidated or has undergone any degree of fibroid change, its expansive power will be so slight as to be of little use in forcing out the effusion. Tubercular empyema is the form which is most fre-

quently followed by perforation, and here, from the nature of the process, the outcome can be nothing but disastrous. In empyema due to pus organisms perforation is uncommon. When it does take place it is through the chest-wall, with the possibility, though not probability, of ultimate perfect cure. In this form the lung would seem to be seriously crippled, probably by a dissemination throughout its structures of the pus organisms, and consequently less able to expand, and so aid in the drainage of the pleural cavity. If the case be left wholly to nature, long continued suppuration is likely to result, with its necessarily bad termination.

For some time after the existence of an empyema the lung is simply compressed, there is no organic change in its structure. The pyogenic membranes covering its surface do not seem to organize and contract as early as in an adult, so that expansion easily follows removal of the pus. But eventually a fibroid change takes place in the pulmonary tissue, seriously impairing its elasticity. This is most marked and earliest brought about where pus organisms are present, and seems to be the result of the presence of these organisms, rather than of the mechanical collapse of the lung. The process is inaugurated by a widely-scattered catarrhal condition of the vesicles and finer bronchi. Eventually this involves the fibrous tissue and a thickening and contraction result.

Treatment.—Prompt evacuation of the pus as soon as its presence is recognized is the only measure that can be taken which promises any good result.

In metapneumonic empyema a single aspiration may, and undoubtedly often does, effect a cure. The chest must be emptied as thoroughly as possible, the only precaution being taken to proceed slowly with the evacuation in order to give the lung plenty of time to expand, and to run as little risk as possible of the oozing of blood from the congested pleura. There will always, even in favorable cases, be some reaccumulation of pus, but this ought to subside shortly by absorption. If it does not subside, or if there is any excessive reaccumulation, a second evacuation is necessary, and this is to be repeated till it is positively demonstrated that a cure will not thus result before more radical measures are adopted. While it may be necessary to eventually introduce a drainage-tube, yet temporizing by means of aspiration does no harm. I cannot deprecate too strongly from my own standpoint the placing of all empyemas in children in the hands of a surgeon, for I am certain that in a notable number of cases simple aspiration is perfectly competent to effect a cure. Where the case has existed for a long time, or where pus organisms are the exciting cause, or where repeated aspirations have failed, the introduction of a drainage-tube is necessary. There is only one class of cases where resection of ribs is to be advised—that is tuberculous empyemas. In all the others it is not necessary to go further than aspiration or a drainage-tube.—*University Medical Magazine.*

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NORTH CAROLINA MEDICAL JOURNAL.

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Editorial.

THE STATE HOSPITAL AT MORGANTON.

We have before us the Report of the Superintendent of the State Hospital for the years 1893-4. During this time the daily average of patients was a fraction over 556. There were discharged recovered 132; improved 32; unimproved 11; not insane 3; died 67. The cost of maintaining the patients was, after deducting the cost of new buildings and permanent improvements, about \$150 per capita. The Superintendent estimates the increase in the number of inmates for the next two years, made possible by the building of new quarters, to be 140, and for the support of these he asks for an increase on the appropriation for the past two years, which will be a per capita of only \$70. Think of it and

compare it with the cost of maintaining paupers in the County Homes New Hanover county lets out the keeping of her indigent poor to the *lowest bidder*, and yet she is now paying for their maintainance \$78.32 *per capita* per annum.

The efficient Superintendent, Dr. P. L. Murphy, is to be congratulated upon the marked success with which he has managed the affairs of the Hospital, and, while increasing year by year the comforts of the patients and bringing about a constant betterment of their condition, having constantly reduced their per capita cost until it has reached the low figure of \$142, which is his estimate for the next two years.

Our Legislators may well study these figures and note the vast improvement that has been made in this Institution

under its present Superintendent. They should take a hint, too, from the fact that 140 additional patients can be maintained at a cost less than that in the average poor house. Would it not be wise, then, to so enlarge the present institutions so that all of the State's insane may have the advantage of the greater comforts and prospects of recovery which they would find at these hospitals? The counties have to bear the expense of their maintenance at the poor-houses. Would it not be *economy* to remove them to the State Hospitals, if they can be maintained at less expense? The people pay for it whether these unfortunates are cared for by the county or the State. Therefore if the State can provide for them at a lower rate than the individual counties, it will *save the people money* if the State takes them.

We see it would be wise from a pecuniary stand-point—how is it from a humanitarian point of view? Any one who knows anything about the average poor house in North Carolina, will not hesitate to answer that these places are by no means fit for these

afflicted people. The keepers are generally ignorant persons, often cruel, and there are numerous cases where the insane inmates have been cruelly and inhumanly treated. They are looked upon rather as criminals than sick persons, they have only the commonest and coarsest of food, there is nothing to cheer and encourage them, and, in short, there is no hope and but little possibility of their improvement as long as they have to remain under such adverse conditions. Let them go to the State Hospitals and they are constantly under skilled medical supervision, they have kind and attentive nurses, they are neatly and cleanly clad, they receive such food as will best nourish them, they are given such outdoor exercise as is best suited to the condition of each, and we see from Dr. Murphy's report that, for 264 admissions, *one hundred and thirty-two were discharged recovered*.

What more convincing argument could be advanced in favor of adding to, rather than taking from, the work the State Asylums are doing?

Reviews and Book Notices.

A Dictionary of Medicine. Including General Pathology, General Therapeutics, Hygiene and the Diseases of Women and Children. By Various Writers. Edited by Richard Quain, Bart., M.D., Lond., LL.D., Ed., F.R.S., Assisted by Frederick Thomas Roberts, M.D., Lond., B. Sc. and J. Mitchell Bruce, M.A., Abdn., M.D., Lond., with an American Appendix by Samuel Treat Armstrong, M.D., Ph.D., New Edition, Revised Throughout and Enlarged. In two royal octavo volumes comprising 2,518 pages. D. Appleton & Co., New York, 1894.

The conditions which prompted the

editor to produce this work in 1882 are greatly emphasized at this time. "With progress so rapid and information so diffused, it is extremely difficult alike for the practitioner, the teacher and the student to keep pace"—much more so in 1894 than it was in 1882. As an evidence of this rapid progress, note the following quotation from the remarks concerning Behring's work with antitoxin: "Recently experiments have been made by Behring and

Kitasato, Brieger and Fränkel, and Löeffler, as to the possibility of weakening the action of the bacillus (of diphtheria) by various methods, and so conferring immunity against its further action; but, so far, no results have been obtained which are of use in human therapeutics." And yet, even before the book containing this statement has left the hands of its publishers, the wonderful success that is attending the use of Behring's discovery is attracting the attention and arousing the enthusiasm of the whole world, so rapidly does science progress in this age when once the right track is struck. We might safely assert that no work, which would require much time in passing through the hands of the printers and binders, would be free from the omission of some important advance.

The title of the work, "A Dictionary of Medicine," is rather misleading, as one would suppose it to contain all the terms used in medicine, while such is not the case. It is rather a dictionary of diseases, in which the several diseases are taken up in alphabetical order and their etiology, pathology, symptoms, diagnosis, prognosis and treatment discussed by various well-known authorities, each of whom is peculiarly fitted to write upon the subject allotted him. Each article has its author's name attached. The former edition had no less than 162 contributors and this edition has 50 additional, who have been selected to write upon new subjects or to supply the place of former contributors who have died. The high standing of these gentlemen and their recognized positions as authorities add immensely to the reliability of the work and ensures

the reader that it is up to date, and that the opinions expressed represent the most accepted teaching of the day.

The publishers have left nothing to be desired in the typography and general mechanism of the volumes, and the work is destined to retain its position as a most valuable reference book—a resumé of medical practice, condensed sufficiently for quick reference, but not so brief as to take from its value as a guide.

Sexual Neurasthenia—[Nervous Exhaustion]. Its Hygiene, Causes, Symptoms and Treatment. With a Chapter on Diet for the Nervous. By George M. Beard, A.M., M.D., Formerly Lecturer on Nervous Diseases University City of New York, etc., etc. Edited, with Notes and Additions, by A. D. Rockwell, A.M., M.D., Formerly Professor in the New York Post-Graduate School, etc. Fourth Edition—with Formulas. E. B. Treat, New York, 1895. Price \$2.75.

It will be remembered that this work was first edited by Dr. Rockwell from the posthumous manuscript of Dr. Beard, and but little more was done than to arrange the papers and fill up a gap or two where the continuity was broken. In the present revision Dr. Rockwell has added a chapter on Sexual Erethism. The chapters on Symptomatology and Treatment are full and clear and will prove helpful in a large degree to any who may be called upon to treat this most distressing affliction.

The Johns Hopkins Reports. Report in Surgery. II. The Johns Hopkins Press. Baltimore, Md., 1894.

This report is the result of operations for the cure of cancer of the breast performed at the Johns Hopkins Hospital, from June, 1889, to January, 1894, by Dr. William S. Halsted. In a series of fifty operations there have been recurrence in only 6 per cent., with, however, regnary recurrence in about 15 per cent. more.



Yours Very Truly
Edmund Haywood

Obituary.

EDMUND BURKE HAYWOOD,
A.M., M.D., LL.D.

A Memorial Address, read before the
Raleigh Academy of Medicine,
April 28, 1894.

BY W. I. ROYSTER, M.D.

[Published by order of the Academy.]

MR. PRESIDENT :—It is eminently proper that the Raleigh Academy of Medicine should commemorate the life, character and services of Dr. E. Burke Haywood, and, in view of the personal relations in which he stood to me as preceptor, honored associate and friend, it was a graceful act on the part of the Academy to assign to me the duty of preparing a memorial of our deceased brother.

Grateful for the honor conferred upon me and for the delicacy of the feeling which prompted the choice, yet, knowing that the selection was not the best that might have been made, I hesitated to accept the duty. I was reluctant only because I felt, in all seriousness, that my unpracticed pen was not fitted to perform the service in a manner worthy of the subject. But I desire to do honor to the memory of one I loved, and I am not unmindful of the claims of gratitude to one whose friendship to me was, for more than a quarter of a century, one of my most cherished possessions; and feeling that I should be recreant to my duty by declining the part allotted to me, I yield to the wishes of the Academy.

The biography of an individual

usually includes some account of the lives of his ancestors, and this is not without sufficient reason, for it cannot be denied that heredity and environment are important factors in the formation of character. I purpose to give in the following sketch some facts in the lives of distinguished representatives of the Haywood family in each generation, and shall not fail, I think, to demonstrate the bearing of these facts on the main object of this memorial. This sketch of his ancestors, extracted from published records, will serve to show that Dr. Haywood was the descendant of men who, by superior mental endowments and force of character, rose to eminence in their own days, and whose name and fame the history of North Carolina has transmitted to our times. Further, I shall show that Dr. Haywood worthily bore the honors descending to him as a legacy from his distinguished ancestors.

The Haywood family, coming originally from the Parish of Bolton-en-le-Moors, County of Lancaster, England, has occupied a prominent place in the history of North Carolina from the earliest Colonial times to the present day. The founder of the family in North Carolina was John Haywood, the great-grand-father of Dr. E. Burke Haywood. He was a man of mark. Together with Edward Mosely he was the agent of the Earl of Granville in laying off and selling the lands of that nobleman in North Carolina. Under the Colonial Government he was Treasurer of the northern counties. A first cousin of his, also bearing the

name of John Haywood, was the ablest member of the legal profession in this State. He was Attorney-General from 1791 to 1794, when he was raised to the Supreme Court bench. This position he resigned in 1804. Some years later he removed to Tennessee and made that State his home. Here he soon attained the same eminence which he had reached in his native State, becoming a Judge of the Supreme Court. He was the author of a "Manual of the Laws of North Carolina," "Haywood's Justice," "Haywood's Reports," and of a history of Tennessee.

As showing the esteem in which this representative of the family was held, I may be permitted to quote the words of Chief-Justice Henderson, who, in one of his decisions, says: "I disparage neither the living nor the dead when I say that an abler man than John Haywood never appeared at the bar nor sat on the bench of North Carolina."

William Haywood, son of the first-mentioned John Haywood and grandfather of Dr. E. Burke Haywood, occupied many responsible positions in military and in civil life. In 1765 he was Colonel of the troops in the county of Edgecombe. In 1775 he was Chairman of the Committee of Safety for the same county. He was a member of the State Congress held at Halifax in the spring of 1776, and of that which convened in November of the same year and which adopted the Constitution. He was a member of the committee which framed that instrument. In 1776 he was made one of the counsellors of State.

John Haywood, son of William Haywood and father of Dr. E. Burke

Haywood, was highly esteemed for his ability and his integrity. He was Treasurer of the State from 1787 to 1827, and was the first Mayor of the city of Raleigh. He was the first vestryman selected for Christ church, Raleigh. In 1808 the Legislature bestowed his name on the newly-formed county since known as Haywood county, and the town of Haywood was also named in his honor. He married Miss Eliza Eagles Williams, daughter of Col. John Pugh Williams, a distinguished citizen of North Carolina during the Revolutionary War. He was Captain of the State Troops of Edenton District in 1776, and was commissioned Colonel of the 9th Regiment of the Continental Line in November, 1776. His brother, Hon. Benjamin Williams, of Moore county, was a member of Congress from 1793 to 1795, and was elected Governor of North Carolina in 1799. He was re-elected twice consecutively thereafter and once again in 1807.

Edmund Burke Haywood, A.M., M.D., LL.D., was born in the city of Raleigh, North Carolina, on the 13th day of January, 1825, and died in the city of Raleigh, North Carolina, on the 18th day of January, 1894. In these days of unrest and frequent changes, it may be interesting to note that he died in the house in which he was born. This house was built by his father in the centre of an entire city-square, purchased by him at the first sale of lots in Raleigh, immediately after the city was laid off by the commissioners appointed by the Legislature to select a site for the State Capital, and it has been the residence of the family uninterruptedly from the day of its erection to the present time.

At the tender age of seven years the subject of this sketch was deprived by death of a mother's love and care. After this sad event his elder sister Eliza took the motherless child to her heart and lavished on him the whole wealth of her affectionate nature. She was his companion, guide and teacher. Eliza Eagles Haywood was a remarkable woman. Her intellect was of the very highest order. In person she was beautiful and graceful. Her manners were pleasing and her disposition was amiable. Highly educated, cultured and refined, she was, in her youth, the chief ornament and the leader of the social circle in which she moved. Refusing many brilliant proposals, she remained unmarried and devoted her life to the training of her young brother. Fortunate was it for him that she possessed all the qualities necessary to fit her for the duties she assumed, for it cannot be doubted that she influenced, to a great degree, the development of his character.

Want of space forbids more than a reference to his two distinguished brothers, Dr. Fabius J. Haywood, the eminent physician, and George W. Haywood, the well-known Attorney and Counsellor-at-Law.

Dr. E. Burke Haywood received his early education at the Raleigh Male Academy under the Rev. Dr. McPheeters, Silas Bigelow and J. M. Lovejoy, the teachers in charge successively of that widely known school. At the age of eighteen he entered the University of North Carolina in the celebrated class of which Gen. Johnston Pettigrew, Senator John Pool and Senator M. W. Ransom were members. He attained first distinction, but was forced by ill-health to relinquish his

studies before graduation. He began the study of medicine under his brother, Dr. F. J. Haywood, then the leading practitioner of Raleigh. He received his degree of M.D. from the University of Pennsylvania in 1849. Immediately thereafter he began the practice of medicine in his native city. The following year he became a member of the North Carolina Medical Society.

In November, 1850, Dr. Haywood married Miss Lucy A. Williams, daughter of Alfred Williams, of Raleigh, a man of singular purity and beauty of character, whose name in the business world is a synonym of integrity, and who, perhaps, has never had an enemy.

On the breaking out of the war in 1861 Dr. Haywood abandoned his practice, joined the Raleigh Light Infantry and was elected Surgeon of that command. In May, 1861, he organized at Raleigh the first Military Hospital established in North Carolina during the war. Immediately thereafter he was sent by Governor Ellis to gain important information by inspecting the military hospitals on Morris Island, South Carolina. On May 16th, 1861, he was appointed Surgeon of the North Carolina State Troops, and placed in charge of the Fair Grounds Hospital. At the same time he was appointed by the Governor Surgeon of the Military Post of Raleigh, North Carolina, with the assimilated rank of Major. On the 15th day of June, 1861, he was appointed President of a board of surgeons to examine applicants for the position of Surgeon to the North Carolina Troops. Dr. Haywood remained in the military service of the State until December 4th, 1862, when he was appointed by the Secretary of

War Surgeon of the Provisional Army of the Confederate States, to rank as such from August 1st, 1862. He was placed in charge of the Pettigrew Hospital, Raleigh, North Carolina, which position he retained until the close of the war. During the seven days battles around Richmond, he was on duty at Seabrooks Hospital in that city. In this year he was appointed President of the Medical Board at Raleigh for granting furloughs and discharges from the Confederate States Army, and was also appointed Acting Medical Director in the Confederate States Army for the Department of North Carolina.

When the war ended there were still numbers of sick and wounded Confederate soldiers under his care in Pettigrew Hospital. To these he continued to give his unremitting attention until they were restored to health and able to return to their homes. The last one was discharged on the 4th of July, 1865. Dr. Haywood then resumed his civil practice.

In June, 1866, he was elected Vice-President of the North Carolina Medical Society and also a member of the State Board of Examiners for six years and served as examiner in surgery. In 1868 he was made President of the Medical Society, and in this year the University of North Carolina conferred on him the honorary degree of A.M. In 1870 he was one of the organizers of the Raleigh Academy of Medicine. In 1871 he was appointed by the Medical Society a member of the committee on publication of its transactions and held the same position in 1872 and in 1873. In 1872 he was elected Secretary of the Raleigh Academy of Medicine, and

was appointed by the Medical Society a member of the board to examine applicants for license to practice pharmacy.

Grateful acknowledgement is due to Dr. Haywood for an important service he rendered in this year to the profession in North Carolina. In the case—*State vs. George Dollar*, tried January, 1872, at Special Term of Wake Superior Court, Dr. Haywood was summoned, not as a witness to any fact, but as a professional expert. His fee for expert testimony was not allowed and the judge was of opinion that he was not entitled to any compensation as an expert, and directed the ordinary fee for attendance as a witness to be paid. From this judgment Dr. Haywood appealed, and the Supreme Court decided in his favor, thereby establishing the right for which he contended, that "one summoned as an expert in a criminal action is entitled to extra compensation."

In 1873 he served as a member of the Board of Censors of the Medical Society, and in March of that year was elected a corresponding member of the Gynecological Society of Boston, Massachusetts. In 1874 he was elected President of the Raleigh Academy of Medicine. In 1875 he was a delegate to the annual session of the Association of the Medical Officers of the Confederate Army and Navy, which convened in Richmond, Va. On the 16th of March, 1866, he was appointed a member of the Board of Directors of the North Carolina Insane Asylum, and in 1875 he was elected President of the Board. In 1889 he resigned that position and was appointed by the Governor Chairman of the Board of Public Charities. He was a dele-

gate from the North Carolina Medical Society to the American Medical Association in the years 1869, '70, '75 and '76, and was also a delegate to the International Medical Congress held at Philadelphia, in September, 1876, and again a delegate to that body at the session held at Washington City in September, 1887. In 1889 he was appointed by the Governor to represent the State of North Carolina in the National Quarantine Conference held at Montgomery, Ala. In June, 1889, the University of North Carolina conferred on him the degree of LL.D. This is the first instance in which our University conferred this degree on a physician in North Carolina.

He was appointed by the Governor a delegate to the 17th National Conference of Charities and Corrections, held at Baltimore in May, 1890, and again to the 18th session of that body, held at Indianapolis in May, 1891. In this year he declined a re-election to the presidency of the Board of Charities, but continued to serve as a member of the Board.

The position which Dr. Haywood occupied for so many years as President of the Board of Directors of the North Carolina Insane Asylum was to him a sacred trust. His interest in the insane was deep and abiding, and his labors for the welfare of this unfortunate class were indefatigable. To him belongs the credit of giving to the Legislatuse of 1875 information which induced that body to reject as unsuitable an old hospital building proposed as an asylum for the colored insane. At his suggestion the commission was appointed which selected the site near Goldsboro upon which the new Asylum was built. His influence was also ex-

erted in favor of the establishment of the Western Insane Asylum.

He was examiner for several of the leading life insurance companies, and in two companies held the position of Medical Referee for North Carolina. With his long experience, his great skill in physical diagnosis and the care he conscientiously bestowed on every case, he was a model of all that is excellent in this branch of professional work.

He was President of the Raleigh Academy of Medicine for the year 1893. He was appointed by the Governor one of the delegates to represent the State of North Carolina in the Pan-American Medical Congress, and in that capacity he attended the session of that body at Washington City in September, 1893.

At the time of his death he was physician to the Peace Institute and one of the physicians to the North Carolina Institution for the Deaf and Dumb and the Blind.

This meagre record—this epitome easily crowded into a few sentences—a mere catalogue of positions held, of things done, of honors received, can give no adequate idea of the long, laborious and useful life of Dr. Haywood. This idea we can comprehend only when we grasp, in all its fullness, the real meaning of these bare statements; when we see with the mind's eye the self sacrifice, the unremitting labor of the busy days, the anxiety of the long nights spent in toil for his fellow-men, and the ever-present sense of responsibility that made up this long professional life; above all, only when we clearly perceive the determining spiritual force that gave the

moral quality to the actions we so justly admire.

The life of every man with an earnest purpose, however limited his sphere of action, if truly told, is a lesson and an inspiration. Surely, therefore, it cannot be unprofitable to pause and contemplate the character of this man who occupied places of trust, bore on his shoulders the burdens of many, planned much for the good of his fellows, who healed the sick, who spent his life in doing good and died beloved and lamented.

Dr. Haywood was the most highly honored doctor of medicine in North Carolina. As a physician and as a surgeon he stood at the head of our profession. This position he did not reach by a happy combination of fortuitous circumstances. The fame and the honors he received came to him as a reward due to his ability, his learning and his character. His success was achieved, his reputation was earned. Granting the superior mental endowments he possessed, the path he so untiringly trod could lead only to the success he attained.

His preparation for his life-work was thorough. As a child, he was trained to habits of industry, order and obedience. He laid the solid foundation of a broad and liberal education before he attempted to rear the superstructure of professional learning. His medical training was the best that could be obtained in that day. He loved books, and to the day of his death he was a diligent student. He entered into the practice of medicine with enthusiasm controlled by good judgment, and with energy directed by methodical habits.

He desired success and strove to

attain it, but the gratification of self-love was not the motive of his life. His ambition was of a nobler sort. Those who knew him well knew that he acknowledged the moral responsibility involved in the possession of talents and opportunities. To him success was a means and not an end. Failure to attain it, possible only by a mis-use of his powers, would have implied neglect of duty.

He was well read in medical literature, and was ever abreast of the foremost in the progress of medical science. His studies were prosecuted carefully and systematically. Whatever he learned his memory retained with great tenacity, and his knowledge was always at his command. While he was not wanting in any qualification of an able physician, his preëminence was, perhaps, chiefly owing to his excellent judgment and his surpassing skill in diagnosis.

He possessed every endowment, both of mind and body, necessary to the highest attainments in the art of surgery. He had a cool head, a keen eye and a steady hand. He was fertile in resources and never lost his self-possession in emergencies. He was conservative in temperament. Neither desire for notoriety nor exuberant enthusiasm ever induced him to advise any surgical interference that his judgment did not approve, nor did fear of adverse criticism ever deter him from performing any surgical operation, if, in his opinion, it was necessary to the welfare of the patient. He maintained his calmness and self-control under all circumstances. He performed a Cæsarean section or ligated the external iliac artery with a hand as steady and a mind as imper-

turbable as when he dressed the simplest wound. He had a larger surgical practice than usually falls to the lot of a general practitioner of medicine in a city no larger than ours. His four years of service as a surgeon in the Confederate Army gave him an abundant experience, and in civil practice his reputation brought him many patients from a distance. He performed many important surgical operations. An account of those not already known to the profession would be interesting and instructive, but is forbidden by the limits of this address. No surgeon ever obtained better results, whether we regard the immediate effects of his operations or consider their remote consequences. His manner of operating could not have been described as brilliant—a term which, as usually employed, would have been by no means acceptable to one so averse as was Dr. Haywood to everything that was showy or theatrical. He knew his surgical anatomy well and performed his operations carefully and skilfully. He was cautious, but not timid; bold, but not rash. In every important case he thoroughly prepared the patient for the operation, and his after-treatment was such as could be given only by one who was an able physician as well as a skilful surgeon. To this may be attributed much of his success. In connection with his surgical work it is worthy of remark that his eye-sight was in no wise impaired by age. He had nearly completed his three-score years and ten, and if his natural strength was somewhat abated, his eye was not dim.

Dr. Haywood was an admirable consultant. He was punctual in keeping his engagements, courteous in his de-

meanor, kind and considerate of the feelings of his brother practitioner. He was helpful to the attending physician, not only because his knowledge, skill and experience enabled him so often to make a correct diagnosis in an obscure case or to decide a doubtful point in therapeutics, but because with ready sympathy he encouraged and sustained his professional brother, and when their united efforts were not crowned with success, he willingly assumed his full share of the responsibility. He was not contentious or disputatious, and never allowed a trifling matter to become a source of disagreement in consultation, but when compelled, by a difference of opinion on a point of vital importance, to dissent from the views of the attending physician, he expressed himself with the utmost courtesy, and if, when necessary, he urged his own opinion with the earnestness befitting so serious a matter, he never failed to manifest a respect proper for one who conscientiously held a contrary opinion. He had a thorough knowledge of the code of medical ethics, and regulated his conduct by its spirit as well as by its letter.

He was rather reserved to strangers, and by no means communicative to mere acquaintances, but to his intimate friends he was the most charming of companions. His conversation, always instructive, never dull, was enlivened by a dry humor of a most delicious flavor. His features were noble and his bearing dignified. His countenance was expressive of firmness and decision, courage and intelligence, and only a superficial observer would have failed to see depicted therein the finer and softer traits of character. His

friends knew that he had a most affectionate nature—that he was as tender as he was brave. He had a sympathetic heart and it never grew hard or indifferent to the sufferings of his fellow-men. His sympathy grew by exercise, and it is no imputation of weakness or disparagement of his manhood to say that his tears, which his own suffering hardly could have wrung from him, sometimes flowed at the sight of agony he was impotent to relieve.

He was a conscientious man and one who thought deeply on the great problems of life. He had determined in his own mind the ethical laws by which his conduct should be regulated, and so true was he to his convictions, so faithful to his ideals, that neither pleasure nor profit could seduce, nor fear drive him from the path of duty. He found no difficulty in reconciling a belief in the doctrines of the Christian religion with perfect intellectual liberty. He was a devout believer and a man of unaffected piety. He was singularly free from the fears that disturb the peace of most mortals.

The following words of Marcus Aurelius, concerning his teacher, Maximus, the Stoic, give us, so far as they go, a surprisingly exact description of the character and demeanor of Dr. E. Burke Haywood :

“I observed that everybody believed that he thought as he spoke, and that in all that he did he never had any bad intention; and he never showed amazement and surprise, and was never in a hurry, and never put off doing a thing, nor was perplexed nor dejected, nor did he ever laugh to disguise his vexation, nor, on the other hand, was he ever passionate or suspicious. He was

accustomed to do acts of beneficence, and was ready to forgive, and was free from all falsehood; and he presented the appearance of a man who could not be diverted from right, rather than of a man who had been improved. I observed, too, that no man could ever think that he was despised by him or ever venture to think himself a better man. He had also the art of being humorous in an agreeable way.”

To portray the sweetness as well as the nobility of Dr. Haywood's character, we must needs invade the privacy of his home, where he was no longer the man of affairs, the distinguished physician, the honored citizen, but the affectionate father, the husband loving and beloved. Suffice it to say that in these relations his character showed its most beautiful aspect, and that here, where he was known best, he was loved most. A nearer view would be a violation of good taste. The respect due to sorrows into which we cannot enter, bids us turn aside and go softly, with bowed heads and averted gaze.

It was Dr. Haywood's intention to retire from the practice of medicine on his sixty-ninth birth-day, and to devote his declining years to studious pursuits for which his unimpaired mental vigor, with his accumulated stores of knowledge, so well fitted him, and to a life of calm enjoyment in the bosom of his family, so congenial to his affectionate nature, but it was determined otherwise. Providence decreed that his life should end with his life-work. On his birth-day, Saturday, January 13, 1894, he visited his patients; on Sunday, the 14th, he was stricken with mortal sickness, and on Thursday, the 18th, he died:

His departure left no incompleteness

in his life. He was not an actor recalled before his part was played. His life was symmetrical. His work was done, and he was ready to receive his reward.

And now the last scene! "The end crowns the work." He, whose watchword had been duty, whose life had been ordered exactly in accordance with the motto he so often repeated, "Do right and fear not," met death face to face with the calmness of

a brave man, with the resignation and the hope of a Christian. In that supreme moment his concern was for those weeping around him and he strove to comfort them. His last words, uttered with painful effort and failing breath, were: "Do not be unhappy about me; I am not afraid to die; it is all right on the other side."

What more shall we say? He passed over to "the other side," and entered into rest.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From January 10, 1895, to January 23, 1895:

Smith, Col. Joseph R., Assistant Surgeon General, will be relieved from duty as Medical Director Department of the East, to take effect about February 5, 1895, and will proceed to his home, where he is authorized to await retirement.

Tilton, Col. Henry R., Deputy Surgeon General, is relieved from duty at Fort Omaha, Nebraska, and will report in person to the Commanding General Department of Dakota, for duty as Medical Director of that Department, relieving Col. Charles C. Byrne, Assistant Surgeon General. Col. Byrne, on being thus relieved, will report to the Commanding General Department of the East for duty as Medical Director of that Department.

Lauderdale, Major John V., Surgeon, will be relieved from duty in the Department of the East, to take effect upon the expiration of his present leave of absence, and will then report for duty at Fort Omaha, Nebraska.

Heyl, 1st Lieut., Ashton B., Assistant Surgeon, is relieved from duty at Co-

lumbus Barracks, Ohio, and ordered to Fort Thomas, Kentucky, for duty.

THE NAVY.

Two weeks ending January 26, 1895:

Waggener, Jas. R., Surgeon, placed on waiting orders.

Curtis, L. W., P. A. Surgeon, detached from Naval Hospital, Chelsea, Mass., and placed on waiting orders.

Stone, L. H., P. A. Surgeon, ordered to the U. S. S. "Alliance" January 22, 1895.

Ayers, J. G., ordered to the U. S. S. "Olympia."

Pigott, M. R., P. A. Surgeon, ordered to the U. S. S. "Olympia."

Norton, O. D., P. A. Surgeon, ordered to Naval Laboratory and Department of Instruction and ordered to the Naval Hospital, Brooklyn, New York.

Hope, J. S., Assistant Surgeon, ordered to examination preliminary to promotion March 4, 1895.

Official list of the changes of station and duties of medical officers of the United States Marine Hospital Service, for the fifteen days ended January 15, 1895.

Carter, H. R., Surgeon, to assume temporary command of Cape Charles Quarantine, January 7th, 1895. Re-

lieved from such duty January 14th, 1895.

Perry, T. B., P. A. Surgeon, to proceed to Delaware Breakwater Quarantine Station for temporary duty and to rejoin station (Cape Charles Quar-

antine) upon Completion of same, January 14th, 1895.

Wertebaker, P. A. Surgeon, granted leave of absence for seven days January 3d, 1895.

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Miscellaneous Items.

We learn that steps are being taken to raise a monument to the memory of the late Prof. W. C. Dabney, of the University of Virginia.

Professor Alfred L. Loomis died at his home in New York on the 23d of January, having just entered his 64th year. The cause of his death was pneumonia of only a few day's duration.

The Weather Bureau of the Department of Agriculture have issued a circular letter announcing that the Secretary of Agriculture will undertake the systematic investigation of the climate in relation to its influence on health and disease. It is hoped to make the investigation of interest and value to all, but especially to the medical profession, and to those seeking to restore their health by change of climate. He asks the hearty coöperation of the various boards of health, and of all physicians who may feel an interest in the work. Coöperation will consist of sending vital statistics from the various localities, and no remuneration can be offered other than sending to all who make these reports, the publications of the Bureau bearing upon climatology and its relation to disease. Full information can be had from Mark W. Harrington, chief of the Bureau, Washington, D. C.

Some one has found out now that milk-tickets are frequent carriers of contagion True, no doubt.

Messrs. Frederick Stearns & Co. have issued a neat pamphlet on Kola. It is illustrated and gives the history, habitat, botany, native uses and the physiological action of kola.

The following is the health report of Wilmington for January, 1895:

	Whites.	Col.	Total.
Population.....	9,000	13,000	22,000
Deaths.....	17	20	37
Annual death rate rep.	22.7	18.5	20.2

A bill has been introduced in Congress to place antitoxin on the free list. It should be passed at once.

The preparation of antitoxin was begun in Boston by the inoculation, January 25th, of five horses, at Gallop's Island.

DR. CHAS. DAY, M. R. C. S., etc., 79 St. Mark's Square, West Hackney, London, writes, on January 17th, 1893: I have prescribed your preparation, IODIA, with very satisfactory results. Its power of arresting discharges was very manifest in a case of leucorrhœa, and another of otorrhœa. In the latter case, the result of scarlet fever in early life, the discharge had existed for many years. The patient could distinctly feel the action of the IODIA on the part, and the discharge gradually dried up.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, FEBRUARY 20, 1895.

No. 4.

Original Communications.

TOTAL EXTIRPATION OF THE UTERUS FOR FIBROMA COMPLICATED BY PREGNANCY.*

By J. A. WATSON, M.D., Asheville, N. C.

In reporting the following case I will not attempt to give any formulated rules for the surgical treatment of tumors of the uterus. The relation in which the tumor stands to the uterus and the complications which surround each case must necessarily make each a law unto itself subject only to the general principles of conservatism.

If the nature of the case is such that the tumor can be safely removed and the uterus spared, and it often can be in uncomplicated cases of the class I now report, then that should be the first consideration. If, on the other hand, the uterus must be sacrificed, I unhesitatingly recommend total extirpation, for the reason that it meets more perfectly the two cardinal requirements of modern abdominal surgery—asepsis and drainage—than does any

of the other methods necessitating its destruction.

I submit to you for your discussion the treatment I adopted in the following case of fibro-myoma complicated by pregnancy. I first saw Mrs. P. in consultation with the late Dr. Neilson. She was a pale, thin, unhealthy-looking woman, 31 years of age, had been married six months and was four months pregnant. Her heart's action was feeble, her respiration was difficult and rapid. Persistent nausea and loss of sleep, due to pain, had exhausted her strength so that she was compelled to keep her bed. She had suffered from menorrhagia, rectal and vesical irritation for two years past; but as her general health continued good she had married, conception had followed and from this occurrence dates her serious trouble. The influx of blood into the uterine

*Read before the Buncombe County Medical Society, January 7, 1895.

vessels incident to gestation had caused the tumor to develop very rapidly and the usual features of a normal pregnancy were immersed into the clinical history of a fibro-myoma. Examination per vaginam showed a solid immovable tumor of the uterus. It had filled the pelvic cavity and crowded the cervix up under the pubes. The rectum was flattened out like a ribbon and the hemorrhoidal vessels greatly congested. Through the thin abdominal walls the tumor could be distinctly outlined. Lying on top of the solid tumor, and slightly to the left of the median line, was a soft, fluctuating mass which was recognized as the fetal sack. It was evident that an abdominal section was the only hope of relief. She was removed to the Mission Hospital, and, after being carefully prepared, the abdomen was opened, the incision extending from the pubes to two inches above the navel. The tumor, which proved to weigh eight pounds, lay freely in the peritoneal cavity. It was attached to the posterior wall of the uterus near the fundus by a short, broad pedicle and received all of its blood-supply through this channel. It had developed rapidly in the direction of least resistance, which was upwards and forward, and, as the pedicle was very short, it had literally lifted the uterus from the pelvic cavity and spread its walls out over its own broad, smooth surface. The uterine walls were abnormally thin. The fetus could be felt through them. It was dead.

In uncomplicated cases of fibro-myomata attached to the uterus by a short, broad pedicle, Schröder advises that an elastic ligature be passed around the supra-vaginal portion of

the cervix uteri to control hemorrhage and then to cut the pedicle off smooth with the uterus, and if it is too broad to bring the edges together, to hollow out the uterine walls till they can be made to approximate. The wound is then securely sutured and the peritoneum neatly stitched over it. The elastic ligature is now removed and bleeding watched for. This is a conservative method, and should be followed in uncomplicated cases, but to pass a rubber ligature around the supra-vaginal portion of the cervix uteri, when the fundus of the uterus contains a dead fetus and constrict it sufficiently to control hemorrhage, would be to invite a miscarriage at a very undesirable time; besides it would be impracticable to hollow out thin uterine walls without opening the uterine cavity and turning loose its septic contents on the peritoneum.

I decided on total extirpation. I passed a rubber ligature around the sulcus-like pedicle, tightened it and severed the connection between the tumor and the uterus; there was considerable hemorrhage, but this was promptly controlled by clamp forceps. The tumor was now lifted from the abdominal cavity and the patient was changed to the Trendelenburg posture. I then made a transverse incision through the peritoneum, covering the anterior surface of the uterus one and one-half inches above the bladder, and a similar transverse incision on the posterior wall of the uterus. The peritoneal flap and bladder were pushed forward from the uterus until the cervix was reached. I now cut directly into the vagina, separating it from the cervix by a semi-circular incision stopping short of the uterine

artery anteriorly. The posterior peritoneal flap and rectum were now separated and the vagina and cervix similarly treated posteriorly. Clamps were now passed by an assistant up through the vagina, securing the uterine arteries and the lower portion of the broad ligaments well in their grasp. The ovarian arteries and the broad ligaments down to a junction with the clamps were now double ligatured with heavy catgut and the uterus cut free from its attachments. The abdominal cavity was flushed and then sponged dry and the vagina loosely packed from above with iodoform gauze so applied as to drain the subperitoneal space.

The ligatures on the ovarian arteries and broad ligaments were cut short and the edges of the peritoneal flaps,

which had been separated from the anterior and posterior surface of the uterus were brought together by continuous sutures of catgut, thus shutting off the peritoneal cavity from the vagina below. The abdominal incision was now closed and the patient placed in bed. The clamps were removed at the end of thirty hours. Catheterization of the bladder was necessary for one week, but with this exception she made a smooth and uninterrupted recovery and left the Hospital cured at the end of the fourth week.

I do not advise the use of clamps in abdominal hysterectomy and used them in this case as an experiment, it being necessary to finish the operation in the shortest possible time on account of the extreme weakness of the heart under the anæsthetic.

THE INDICATIONS AND NATURE OF TREATMENT IN SEVERE ABDOMINAL INJURIES AND INTRA-ABDOMINAL HEMORRHAGES UNACCOMPANIED BY EXTERNAL EVIDENCE OF VIOLENCE.*

By JOHN B. DEEVER, M.D., Professor of Surgery Philadelphia Polyclinic;
Assistant Professor of Surgical Anatomy University of Pennsylvania; etc., etc.

Contrary to our custom, which has been for the orator on this occasion to present an address upon the advances made in surgery during the preceding year, I would beg the privilege of our Honorable President and Fellows to substitute therefor a paper upon a subject that must appeal to every practical surgeon, namely, "The Indications and Nature of Treatment in

Severe Abdominal Injuries and Intra-abdominal Hemorrhage Unaccompanied by External Evidence of Violence."

Every surgeon has undoubtedly at some time in his experience, either in private or hospital practice, met with cases coming under the class covered by the title of this paper. These are cases in which the history and general condition of the patient give the impression that there is a serious lesion

*Read before the Philadelphia Academy of Surgery, January 7, 1895.

within the abdomen, and yet, upon examination, we find total absence or only slight evidences of injury. The tendency, I fear, with many, is to treat these patients tentatively, only to be awakened at the autopsy to the fact that a rupture or a tear existed in the abdominal cavity, which, by early radical operation, could have been relieved.

The mortality in these cases is appalling; references to the literature of the subject will amply bear out this statement, which is readily accounted for by the nature of the injuries. Where the lesion is of the liver or spleen, if the patient does not die of shock or hemorrhage, a violent peritonitis supervenes to which he shortly succumbs. If the liver, spleen or kidneys are involved, death from hemorrhage may ensue in a very short time. Should the stomach, intestine or bladder be ruptured and their contents poured into the peritoneal cavity, death from peritonitis is the result. In rupture of the mesentery the danger is from hemorrhage, yet, when the opening in the mesentery is small, a clot may form sufficiently large to control the bleeding. Should death occur under these circumstances it would be the result of peritonitis caused by the free blood in the peritoneal cavity. I report a case of this character where recovery followed immediate operation. In ruptured intra-uterine pregnancy death is due either to hemorrhage or peritonitis.

The usual history of these cases, with the exception of extra-uterine pregnancy, is that the patient has received a direct injury to the abdomen, which is found to be unaccompanied by external evidence. These injuries

may result from railroad accidents, from being caught between shifting cars, or from blows upon the abdomen received in various ways.

This class of injuries is quite common in military surgery, more so in the past when spherical balls were used and only a low velocity attained. A majority were supposed to be caused by the violence of the wind displaced by the passing ball, but we now know that they were due to the impact of the balls almost entirely spent.

Two cases which illustrate this occurred at the siege of Sebastopol. In neither did the clothing or the abdominal walls show any signs of injury, but in both the liver and spleen were comminuted to a pulp and the intestines extensively lacerated (Mr. Hulke, *Lancet*, December 31, 1892).

As yet we have no reports from surgeons of the armies engaged in the present strife between Japan and China, but it will be of great interest to read the records of such cases. We can expect, I think, a very full and detailed account from the Japanese surgeons. We have all applauded the work of some brilliant individuals of the Japanese profession, and, in fact, we must assign to Japan in medicine the same standing that she has taken in other walks of civilized life, and which she has demonstrated she can hold.

The most prominent symptom is pain, which is accompanied by shock, the degree of which is dependent upon the extent of injury and the temperament of the individual.

I might say here that temperament and nationality have a strong bearing in the production of shock. Persons of a highly nervous temperament suffer more from shock than do phlegmatic

individuals. For example, Americans are far more liable to suffer a severe degree of shock following injuries or operations than are the Germans.

The pain is peculiar and difficult to describe, but is readily recognized by one who has seen many of these cases and by the patient himself. It is not that of ordinary intra-abdominal affections, but is described by the patient as if something had given way or ruptured, and is usually accompanied by a consciousness of impending death. It is usually accompanied with tenderness, which will be more or less localized, unless the ensuing peritonitis be general. In the early stages of the injury, when shock is most profound, it may not be so pronounced, and if large doses of opium be administered it may be masked throughout the course of the trouble.

When vomiting is present it is usually associated with pain. Rarely does the vomited matter contain blood.

There is often seen a characteristic rigidity of the abdominal walls, which is due to intra-abdominal irritation. I have seen this so marked as to recall to mind the checker-board appearance of the normal abdominal walls as represented in the pictures of the early artists.

In the cases I have observed consciousness has invariably been retained for varying periods of time. Restlessness is not usual in the early stages except in severe hemorrhage, but later on, when peritonitis develops, it is not an uncommon symptom.

The pulse and temperature vary according to the degree of shock. The former is weak and running, varying from 100 to 160, and the temperature subnormal. If reaction takes place

the pulse becomes stronger and less frequent, and the temperature reaches the normal line. After reaction peritonitis is invariably the rule, and is accompanied by an accelerated and a high-tension pulse. The temperature under these circumstances is unreliable, as it does not correspond to the degree of inflammation or septic infection. A high temperature with a slow pulse is less significant than a rapid pulse with a low temperature. In cases of septic peritonitis, where autopsy revealed a belly cavity full of foul pus, I have seen the temperature run a normal course throughout the disease.

The part the sympathetic system of nerves, which has its largest distribution in the abdominal cavity, may play in injury to the abdomen is important in considering the differential diagnosis between the simple contusion and contusion accompanied by visceral lesion. In the former the absence of the severe and characteristic pain, of constant and persistent vomiting, of the anxious expression and presentment of impending death, and of any evidence of loss of blood, associated with the occasional presence of suddenly developed meteorism, will usually be sufficient to establish the differential diagnosis. This condition of meteorism is due to paralysis of the muscular coat of the bowel consequent upon the concussion of the plexuses. There are cases, however, where it is very difficult to say definitely whether there be a visceral complication or not. Under these circumstances one can only wait for a comparatively few hours, when, if improvement is not apparent, the operative course is to be pursued. When the solid viscera are

the seat of injury hemorrhage will be the main source of anxiety. The pain and the exsanguination give the clue. If the patient should react, which is unusual, unless the kidney is the injured organ, we will find, in addition, dullness on percussion in the flank. Rectal or vaginal examination may afford aid in determining the presence of a collection of blood in the pelvis. The solid organs suffer most from external violence on account of their fixity, density and close proximity to the bony structures. The liver is the most often injured, then the uterus, spleen and kidney, in the order named. The stomach is least often injured, there being very few such cases on record. Dr. J. W. Goff (*Medical and Surgical Reporter*, 1892), reports a case of ruptured stomach following a horse-kick of the abdomen, verified by an autopsy. The shock was profound and there was vomiting with absence of blood. The author states that he believes immediate operation would have saved the patient's life.

In the *Glasgow Medical Journal* for 1894, vol. xli., Andrews reports a case of rupture of the stomach without external evidence of violence, in which all the symptoms of a serious visceral lesion were present with the exception of vomiting. The rupture was upon the anterior wall; was about an inch long, and involved all the layers. I cite this case as one of special interest on account of the location of the tear and the absence of vomiting.

The liver is the organ most often affected because of its position beneath the ribs and against the spine, and because it is held firmly in place by strong ligaments and blood-vessels. It is most commonly ruptured on its

upper surface, generally in the right lobe, and in a majority of such cases the injury proves fatal. Dr. H. P. Loomis (*Medical Record*, January, 1893), reports a case where the patient was struck by a pole protruding from the back of a wagon, which, when the wagon turned the corner, struck him on the right side, leaving no external evidence of violence. There was a three-inch tear in the right lobe of the liver and a pint of blood in the abdominal cavity. The patient died in the street from hemorrhage before medical aid could reach him.

Mr. Battle (*London Lancet*, 1894), reports a case of rupture of the bile duct in a boy six years of age, who was run over by a hansom cab, in which there was but a slight shock without much pain or tenderness. Vomiting began early and persisted. On the fifth day slight jaundice developed. He was operated upon on the eighth day and the abdominal cavity was found filled with bile. He died on the morning of the ninth day.

Autopsy.—Liver and gall-bladder were intact, but about one-half an inch beyond the junction of the cystic and hepatic ducts the common duct was found to be torn completely through. No other injury was found.

J. E., aged 46 years, was admitted to the German Hospital on November 17th, 1893, suffering from injuries received by being struck by a locomotive. He had a compound fracture of the lower jaw, lacerated scalp wound and fracture of four ribs on the left side, with no other signs of injury. He died six hours later. Post-mortem examination revealed a hemothorax of the left side. The peritoneum was not perforated or otherwise injured,

but the peritoneal cavity was filled with blood. The spleen was completely comminuted, and the left kidney had been forced from its bed and was floating in the retro-peritoneal space. There was an extensive hemorrhage between the layers of the mesentery, and a hemorrhagic extravasation of the posterior wall of the stomach.

H. M. C., colored, aged 16 years, was admitted to the German Hospital on the evening of December 3, 1894, with the following history: While playing about some moving freight-cars he was accidentally caught between the bumpers, sustaining an injury to his abdomen. Examination upon admission failed to disclose any evidences of external injury. The introduction of the catheter drew clear urine. There was a moderate degree of shock, and the patient complained of severe pain in the abdomen and tenderness on palpation. Further investigation proved negative.

The resident surgeon, Dr. Page, not deeming the case of sufficient severity to send for me, treated the patient for shock. When I examined him, upon the following day, it was very evident from the severity of the abdominal pain and tenderness associated with very decided rigidity of the abdominal walls, that he was suffering from a serious intra-peritoneal lesion. I decided to open the abdomen at once. As soon as the peritoneal cavity was opened a large quantity of dark liquid blood escaped. The small intestines were delivered, when the cause of the lesion was found to be a ruptured mesenteric vein, the bleeding from which was arrested by the presence of a large diffused blood clot occupying the interval between the layers of the me-

sentery. To make sure that there was no other lesion, the large intestines, the stomach, the liver and the spleen were carefully examined, but with a negative result. The abdominal cavity was washed out with warm saline solution, glass drainage was introduced into the pelvis and the wound closed. Recovery was uninterrupted.

L. C., male, Italian, aged 35 years, was admitted to the German Hospital, with a history of a fall of about fifty feet, striking upon his abdomen. He was profoundly shocked and exsanguinated. The only external evidences of injury were some slight cuts on the hands and head. A diagnosis of internal hemorrhage was made, and the abdominal cavity opened up. Dark liquid blood escaped as soon as the peritoneum was opened and the source found to be the mesenteric vessels. The mesentery was torn half way across and the intestines lacerated in four places. The mesentery was united with a series of catgut ligatures. The rents in the intestines closed with the Lembertsutures. The abdominal cavity was washed out with hot saline solution and closed. He died two hours after the operation. The autopsy demonstrated several tears in the gut which had been overlooked, and several grape-skins and pieces of fig in the peritoneal cavity.

The most common form of intra-abdominal hemorrhage is that resulting from ruptured extra-uterine pregnancy. While these cases may be due to traumatism without any external evidence they are usually spontaneous. While hemorrhage from the pelvic organs of the female usually occur from a ruptured extra-uterine pregnancy, it may be due to other non-

traumatic causes. Hematosalpinx may occur independent of pregnancy, and rupture either spontaneously or from traumatism. Again, degenerated blood-vessel walls, and especially veins, may rupture under similar circumstances.

M. E., aged 24, nurse, admitted to German Hospital January 20, 1893. While lifting a heavy weight from an elevator she felt something give way in her abdomen. This was immediately followed by severe lancinating pain in the right ovarian region. She was menstruating at the time. Pelvic peritonitis promptly set in. An examination demonstrated a tumor in the right broad ligament about the size of a hen's egg. The peritonitis and tumor subsided to treatment, and she made a slow recovery. Diagnosis, pelvic hæmatocele from rupture of an engorged ovarian vein. •

Hemorrhage itself is seldom the cause of death, but associated as it is with shock, the degree of which is out of all proportion to the severity of the accident, it is frequently fatal in a very short time. When the peritoneum is wounded shock is still more profound, the so-called peritoneal shock.

Hemorrhage within the peritoneum is sometimes very slight and distinctly localized, and may occur several times during the course of the illness. It may take place between the layers of the broad ligament, and soon stop from the pressure.

I report the two following cases of hemorrhage from my list of operations for ruptured extra-uterine pregnancies, as they illustrate so typically the wisdom of immediate operation:

Mrs. A. K., aged 31 years, admitted to the German Hospital, September 21, 1891, with the following history:

Six months prior to admission she had been subject to attacks of vertigo, pain in the back and limbs, and for the last six weeks to a constant bloody vaginal discharge. Examination revealed a retroflexed uterus with a slight tear of the cervix, and the presence of a small movable mass behind and to the left of the uterus.

September 25th, four days after admission, the patient was etherized and the uterus was dilated and curetted. After the operation the discharge stopped, but the patient gained in strength very slowly. She was advised to submit to abdominal section, but preferred to wait until she was stronger. On the night of November 22d she awoke with a severe pain in the right side, and on attempting to walk to the water-closet fainted. After being returned to bed she again fainted and went into a collapse, the pulse becoming almost imperceptible and the temperature falling to 96°. Under active stimulation she reacted. The diagnosis was made of internal hemorrhage from rupture of a probable extra-uterine pregnancy.

The abdominal cavity was found filled with fluid blood and clots, and the right tube ruptured. The tube was tied off and the abdominal cavity flushed with hot saline solution, a glass drainage-tube introduced and the wound closed. The patient was not much shocked by the operation, but on the contrary seemed rather improved. The drainage tube was removed on the third day, the wound healed by first intention. and the patient made a good recovery.

Mrs. J. W., aged 36 years, was admitted to the German Hospital, November 21, 1894, with the following

history: About 2 o'clock on the morning of admission she was seized with a violent pain in the lower abdomen. For this she took some whiskey, and was somewhat relieved. At 9 o'clock the same morning she started for market and was suddenly taken sick, becoming very weak and suffering from a violent pain in her abdomen. She returned home with difficulty and called in Dr. Hand, who advised her immediate removal to the hospital. At the time of admission she was very weak, and there was distinct tenderness over the abdomen with slight dullness on the right side. Immediate operation was advised and consented to.

When the peritoneal cavity was opened it was found to contain fluid blood and clots. The right tube was the site of a small rupture, and was tied off and removed. The abdominal cavity was washed out with hot saline solution, glass drainage introduced and the wound closed. The patient was very much shocked by the operation and reacted slowly. During the operation hypodermatoclysis was practised. The drainage-tube was removed on the fourth day, the wound healed by first intention, and the patient was discharged, well, on the twenty-third day.

The following case of hemorrhage from ruptured extra-uterine pregnancy illustrates the danger of delay as strongly as did the two previous cases the efficacy of prompt interference:

Mrs. P., aged thirty years, was a patient of Dr. S. Cooke Ingraham, of Wissahickon, this city, who furnishes the following history:

I first saw the patient on January 29, 1892. She complained of severe abdominal pains, of a bearing-down

character, and of a sense of fullness in the epigastric region. She had been married seven years, but had never been pregnant, and laughed at the possibility. For the past three years the menstrual flow had been decreasing in amount, and for several months past had been very scant. The breasts were slightly enlarged, but the areolæ were not darkened. The glands of Montgomery were a little more prominent than normal. She had suffered from morning vomiting for the past month.

I was hastily summoned to see the patient on the morning of February 2d, and found her in a state of collapse, pulseless and with a temperature of 96.5° . She reacted to active stimulation and was sent to the German Hospital for immediate operation, a diagnosis of ruptured extra-uterine pregnancy of the tubal variety having been made. Upon admission her pulse and temperature were normal. She did not complain of pain. Examination of the abdomen and per vaginam and rectum failed to reveal any mass, although a circumscribed area of flatness could be demonstrated low down and to the right side. She continued in this condition until February 12th, when, at her own request, she was discharged. On February 23d she was readmitted at Dr. Ingraham's earnest request. At the time of the second admission the abdomen was markedly distended, being tympanitic above and flat below. Pulse 116, temperature 101.5° . She complained of considerable pain.

The following day she was operated on, and when the peritoneum was opened a fetus with clots and fresh blood gushed out. The ruptured sac

occupied the right iliac region, and was tightly adherent to the neighboring coils of small intestines, to the cæcum and to the vermiform appendix. After a prolonged and tedious dissection the sac was enucleated; this was accompanied by a very free bleeding, which necessitated packing of the cavity with gauze. The wound was closed with the gauze packing *in situ*. The patient died the following day of hemorrhage.

The immediate effects of an injury severe enough to cause a serious lesion of an abdominal viscus are sometimes so slight as to be misleading. Very often a patient with such a condition will walk to a conveyance or to the hospital, complaining only of a slight pain. In varying periods of time following the injury more decided symptoms will develop, viz: signs of hemorrhage, if the solid organs be involved, and early peritonitis if the hollow viscera be ruptured or torn sufficiently to allow their contents to escape. When this occurs operation is imperatively demanded without delay. This is also true of hemorrhage consequent upon the rupture of an extra-uterine pregnancy, be it traumatic or spontaneous. In ectopic gestation operation will be necessary in every case at some period of its history; therefore, if a diagnosis can be made, or even a well-founded suspicion of the condition exists, rupture should not be allowed to occur. If rupture does occur, however, immediate interference is the only certain means of saving the patient's life. The longer the operation is deferred the greater the risk to life. Hasty operations, often necessitated by the patient's condition, are likewise less lia-

ble to reach a favorable termination. Blood clots or intestinal or gastric contents cannot be washed out of the peritoneal cavity except by prolonged and repeated flushing.

The almost universal fatality of intra-abdominal lesions of traumatic origin is so well recognized that it seems as if there could hardly be any question as to the wisdom of opening the abdominal cavity. I would not be understood as meaning that abdominal section should be used as a means of diagnosis, but on the contrary I believe that every known means, with attention to the most minute details, should be exhausted in establishing a diagnosis. When a diagnosis is impossible, abdominal section is justifiable only when it becomes the last and only chance for the patient.

I have refrained from using the terms exploratory and diagnostic incisions, believing that they not infrequently serve as a shield to cover a lack of diagnostic ability. It is a moral obligation resting upon every physician and surgeon to develop to the utmost of his ability the highest diagnostic attainments.

Aseptic surgery has undoubtedly been one of the greatest boons to humanity that this nineteenth century has brought forth. But to me it seems that it affords a great temptation to men who have not had experience and surgical training, and who have, therefore, not fully developed their diagnostic skill, to do operations which are not necessary for their patients' good or with a scientific precision.

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SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Seventh Annual Meeting, in Charleston, S. C., November 13, 14 and 15, 1894.

Dr. Richard Douglas, of Nashville, Tenn., followed with a paper entitled Acute Peritonitis.

Appreciating the condition under which the colon bacillus may escape from its natural habitat and become actively pathogenic, and knowing the supply is unlimited, the dose being governed alone by the integrity of the bowel, naturally we accord to this bacillus the first place in the causation of peritonitis.

In obedience to the teachings of experimental work, the surgeon must accept the classification of Pawlowski of two forms of peritonitis:

1. That produced by chemical agents with which we are not concerned.
2. That produced by infection. The latter is more tangible.

The latter is more tangible. It is

Infection from with- out	Immediate.	This is direct infection of the peritoneal membrane through penetrating wounds of the abdomen, either accidental or surgical.
	Mediate.	This form embraces all cases of contamination of the peritoneum occurring from extension of adjacent infected areas, as leakage from mural abscesses or puerperal infection.
Infection from with- in	Immediate.	Visceral perforation or rupture and direct inoculation of the peritoneal membrane with escaping contents, as in perforating typhoid or gastric ulcer, appendicitis or rupture of gut or bladder.
	Mediate.	Infection by emigration of micro-organisms through visceral wall of impaired resistance, as in incarcerated hernia, intestinal obstruction, ruptured ovarian cyst.

fully in accord with our idea of the genesis of the disease. It harmonizes with clinical work. With Mordecai Price, the author agrees that every case of general peritonitis has a demonstrable cause, and that cause is septic in character. Pathological manifestations of peritoneal infection are subject to many variations which, in a great measure, indicate the virulence of the poison and guide us in forming a prognosis, but to simplify matters, the author considered it under two heads, which indicated the microscopic and macroscopic changes, the results of general peritonitis.

It is an indisputable fact that the type and virulence of the inflammation is largely dependent upon the origin, hence in our bed-side work we may consider the subject under the following etiological classification:

The author then reported a few illustrative cases. One case was reported of general purulent peritonitis. The patient recovered, and the author considers that it was due entirely to free incisions, thorough irrigation and ample drainage.

THIRD DAY—MORNING SESSION.

Dr. George J. Engelmann, of St. Louis, read a paper on History of Vaginal Extirpation of the Uterus, in which he stated that at the New Orleans meeting of the Association he was interested in vaginal hysterectomy, which he presumed was a comparatively new operation with very recent modifications; but Dr. Lewis, of that city, called his attention to an old French pamphlet showing that the operation had been done in the '20's. Since then he had found it was done still earlier precisely as it is done to-day, the operation having developed step by step.

Dr. Lewis, of New Orleans, in the discussion stated that the first vaginal hysterectomy was performed by Dr. Dabourg in the little town of Autell, France.

Dr. Edmond Souchon, of New Orleans, read a paper entitled Reminiscences of Dr. J. Marion Sims in Paris.

In 1860 Dr. Souchon had just entered into the study of medicine in Paris, and was attached to the service of Prof. Velpeau. In the spring of the following year he by accident met Dr. Sims, who had come to Paris with a letter to Velpeau from Valentine Mott, of New York. At this time Dr. Sims knew nobody in Paris and could

not speak a word of French, so that the meeting of young Souchon was a very great help to him in his intercourse with Velpeau and the other surgeons of the French capital. Sims' great object was to get a case on which to demonstrate the success of his operation for vesico-vaginal fistula. Velpeau procured a case upon which Sims operated successfully before a large audience of students, doctors and professors in the operating theatre of the old Charite.

The ovation Dr. Sims received was very great and gave him the start that made him the universal surgeon we all know him to have been. Wherever Dr. Sims traveled and located he had more calls than he could attend to. The Doctor's success, however, was not without hard moments, for twice he met cases that came very near terminating disastrously from the effects of chloroform. But their final recovery only increased the admiration of all for Sims' fine qualities as a surgeon.

Dr. Soucher relates in his paper several instances of Dr. Sims' generosity and gives a graphic account of the generous and sublime manner in which Dr. Sims came to his rescue in a trying moment of great distress.

Dr. Souchon's paper ends in words of highest praise, enthusiasm and love for the great and good man that Dr. Sims was.

Dr. George H. Noble, of Atlanta, Ga., read a paper entitled A Case of Carcinoma of the Parturient Uterus; Removed Three Days After Confinement; Recovery.

The specimen he presented was one of carcinoma of the parturient uterus removed by vaginal hysterectomy three

days after labor. The woman had previously been confined, sustaining a laceration of the cervix uteri, which, perhaps, was a factor in the cause of the disease. In the first few months of the last pregnancy the patient was treated locally by her family physician; but there was nothing to cause a suspicion of malignancy. Almost the entire vaginal portion of the cervix was destroyed, less than one-fourth of its circumference remaining intact. The induration extended deep into the uterine tissue, but could not be felt beyond the limits of that organ. The roughened ulcerated surface was easily traced for a considerable distance within the cervix, the os being dilated to about five centimeters in diameter. Her condition was unpromising, and surgical interference was clearly interdicted, so the os and vagina were cleansed thoroughly and lightly dressed with gauze. She was then placed profoundly under the influence of morphia sulphate with a view of arresting labor, securing rest and recuperation sufficient to permit evacuation of the uterus, which occurred spontaneously twelve hours later. The child was poorly nourished and lived only a few weeks, finally dying of inanition.

What is the advantage of hysterectomy over Porro's operation, and if hysterectomy is preferable, should the vaginal or abdominal method be given precedence over the other? To the first question the author answered that hysterectomy undoubtedly promises more to the mother than a Porro operation in cases where the disease is confined to the uterus, and he says that when the cancerous mass can be successfully removed, it is the duty of the surgeon

to do it, as Porro's method merely bridges the woman over the puerperal state and leaves her to her fate. In radical removal there is a promise of cure.

In answer to the second question, the author said it is evident that the method of operating must depend largely upon the character of each individual case. Thus the vaginal operation may be done when it is desirable to take advantage of the diminished liability to shock, even though the large size of the uterus may render the operation more tedious.

The main point in the paper was to show the feasibility of hysterectomy in the puerperal state for cancer of the uterus, as the case reported clearly demonstrated, even though it is too early to claim immunity from the return of the disease.

Dr. John A. Wyeth, of New York City, contributed a paper entitled *Ligation of Arteries*.

The author said that in August, 1894, in an operation for the removal of a malignant neoplasm of the upper left jaw, which involved sphenomaxillary fissure and part of the orbital cavity, it became necessary, as a preliminary operation, to ligate the external artery. In cutting down upon this vessel by the usual incision—the point of bifurcation of the common carotid artery being, as demonstrated by him in a study of 121 subjects, opposite the upper border of the thyroid cartilage—he found quite a network of veins crossing from the median line of the neck to the internal jugular immediately over the point of ligation, and spreading from one-half an inch above down to the bifurcation of the common carotid. As it would

have taken some time to apply a double ligature to each one of these veins, and as the author, on account of the general bad condition of the patient, desired to expedite matters as much as possible, he resorted to this expedient: By catching hold of the sheath of the common carotid and at the same time making gentle traction upon the lowermost of these veins with a blunt hook in an upward direction, he found that with his aneurism needle, armed with a good-sized catgut ligature, he could slip this instrument around the artery just in the crotch of bifurcation of the common into the external and internal carotids. Having every confidence in the healing power of arteries ligated under aseptic conditions, especially those tied with animal ligatures—in preference catgut—the ligature was applied at this point and immediately tightened. It was so close to the common trunk that it also occluded the superior thyroid branch, which is given off, as a rule, just at this point, and which he saw within the grasp of the ligature as he tightened it. The wound was immediately closed without drainage and sealed with iodoformized collodion dressing. The operation on the jaw was completed with an insignificant loss of blood, and on the fifteenth day after the operation the patient left his private infirmary in New York City for his home in the western part of the State. There was no hemorrhage following this deligation.

About five months ago, in a similar operation, a ligature was applied at this point with equal success. The speaker did not relate these two cases for any bearing they might have upon the safety of ligation of the external

carotid artery, since that question had long been settled. But the reason for narrating these two cases was to bring before the Association a consideration of the inflammatory changes which occur in arteries which have been ligated, and to discuss at length the best methods to pursue in these operations to secure the greatest safety to the patient.

In tying arteries an important point to consider is the selection of a ligature. It seems to the author that in the animal ligature, and especially in well-prepared and properly asepticized catgut is found the best ligature material. For the last ten years he had used catgut almost without exception, only once or twice using silk, and then in the ligation of the large venous trunk close to the root of the neck, in which he was fearful that the animal ligature might slip from the blood-pressure in the act of vomiting as the patients came out from under the influence of the anesthetic.

Porta, in 400 experiments, saw that in from one to two years 70 per cent. of catgut ligature had become absorbed; 36 per cent. of silk; 66 per cent. of hemp or flax, and 20 per cent. of horse-hair.

Dr. James Evans, of Florence, S. C., read a paper entitled *Simultaneous Appearance of Cancer in the Breast and Uterus*.

The subject of this interesting manifestation of the disease was a woman 53 years of age, married, and the mother of six children. A striking peculiarity in the history of the case was that, when the disease was most active and destructive in the breast, it rather checked and retarded its tendency in this direction in the uterus.

Excision of the cervix and removal of the breast were proposed, but declined.

The author closed by saying that, although there is a very general consensus of opinion among surgeons that the most successful treatment of cancer affecting the breast and uterus is early and radical removal by the knife, yet it is doubtful, in the opinion of the author, if operation is advisable when the disease appears in multiple form and in distant organs. When the disease is confined solely to the uterus and recognized at an early stage of its invasion, the prompt removal of the organ is usually followed by permanent recovery; in fact, recurrence less often takes place than removal from any other organ or part of the body.

Dr. W. E. Parker, of New Orleans, reported 7 cases of varicocele treated by incision, ligation and shortening of the scrotum. An incision, varying in length according to the size of the varicocele is made, and the scrotum shortened by converting the wound from a longitudinal into a transverse one. All cases recovered with union by first intention, and are still doing well, the period since the first operation being seven months. At the conclusion he laid down the following general indications for the treatment of varicocele. The milder forms should be treated with a suspensory bandage, with proper attention to diet, exercise and bowels. A varicocele should be operated upon: (1) If it is of large size. (2) If it is painful. (3) If marked nervous symptoms be present. (4) If the testicle is atrophying. (5) If the varicocele is increasing rapidly. (6) If it is an obstacle to entering a

public service. (7) If, on account of a patient's occupation, a suspensory is troublesome and he desires an operation.

Dr. Rufus B. Hall, of Cincinnati, Ohio, read a paper entitled Fibroid Tumor of the Uterus with Suppurating Ovary Discharging per Rectum.

As a preface to his report, Dr. Hall said the subject of operative treatment for fibroid tumor of the uterus is one in which the keenest interest is manifested by men engaged in abdominal surgery. The main points in the technique of the operation have been practically settled, but certain minor details in operative procedure are capable of improvement. Complications occasionally arise, which tax to the utmost the skill of the operator.

The following case was reported in detail as illustrating a number of these complications. The patient, aged 44, was known to have a fibroid tumor for five years. She had suffered from sepsis for five weeks previous to the operation. In addition to the fibroid tumor was a large suppurating ovary holding about two pints of pus, which discharged per rectum every eight or ten days. The suppurating ovary was densely adherent, and after its removal disclosed a large opening in the rectum. The operation included total extirpation of the fibroid uterus with the suppurating ovary and repair of the intestinal rent. There was no leakage of the injured bowel after the operation. The patient recovered.

The Doctor drew the following conclusions: The question of operation during sepsis is one that will admit of discussion both *pro* and *con*, but in the end it must be decided by the merits of the individual case and not by rule.

As to technique, total extirpation was given the preference, as it gives the ideal condition, both theoretically and practically, for after-treatment. The Baer method was condemned, as it does not give thorough drainage—a thing absolutely necessary where there are extensive raw surfaces which have been bathed in pus, and no peritoneum to close off the general peritoneal cavity. The strengthening of the suture line with a tag of adventitious tissue was devised. The packing of the pelvis with gauze to protect the cavity from intestinal leakage should any occur, and to prevent intestinal adhesions was recommended. The gauze is usually removed on the fourth day and peroxide of hydrogen used as a wash for the cavity several times daily.

Again, forcible dilatation of the sphincter ani muscle to cause incontinence, thus relieving the intra-intestinal pressure from accumulating gases, the Doctor says, adds greatly to the chances for recovery. He first employed it for this purpose on February 6th, 1893, in an operation for extra-uterine pregnancy with extensive bowel injury, the patient recovering. He says, so far as he knows, he is the first man to practice forcible dilatation for this purpose.

Dr. J. G. Earnest, of Atlanta, Ga., contributed a short paper in which he reported some complicated cases of pelvic surgery. Two cases were detailed simply to illustrate a method of treatment that, under certain circumstances, is safer for the patient and just as apt to give relief of symptoms as total extirpation of the tumor, also to emphasize a growing conviction the author has that intestinal adhesions

are frequently tinkered with, when it would be best to let them alone. The essayist was no advocate of timid or imperfect surgery, but in cases where the tumor can be effectually dealt with without disturbing old, thoroughly organized adhesions, which the history and condition of the patient clearly show to be harmless, and, in view of the fact that if those adhesions are loosened they will almost certainly anchor at some other point where they may be a source of constant annoyance, or even produce a fatal obstruction of the bowel, he believes it best to leave them undisturbed.

Dr. Herbert M. Nash, of Norfolk, Va., read a short paper on The Removal of an Intra-Uterine Fibroid Tumor by Morcellement Without Hemorrhage.

In September, 1892, he saw, in consultation, Mrs. A., aged about 42 years, the subject of intractable hemorrhages from the uterus, lasting from two to three weeks of each month, and which had been habitual for several years. The uterus could be plainly felt above the pubes, and by the conjoined method, sound and so forth, the diagnosis of intra-uterine fibroid was made. Not wishing at that time any radical procedure, she continued under the care of her physician, whose best efforts to control the hemorrhage proved fruitless. On the 11th of July, 1893, she entered the hospital for surgical treatment.

On the 26th of August the essayist operated under ether. It was found quite impossible to dilate the os to the extent desired, but there was room enough for manipulation without dividing the cervix, and no difficulty was found in seizing the presenting mass—the attachment of which to the uterine

walls had been made out to be sessile—with a strong vulsellum. Upon making traction with some force, in order to determine the best method of procedure, the tissue gave way, and the withdrawn part of the detached mass was quite large, but no bleeding followed. This fact decided the Doctor to proceed by morcellement, and with the forceps, scissors and the instrument he exhibited, the whole growth was removed piece-meal, and with only a slightly colored serous discharge. The previous packing had been so effectual that the growth itself, and, indeed, the uterine walls, appeared to have been exsanguinated. The fragments removed, when under strong compression, presented a mass of fibroid tissue nearly as large as an ordinary cocoanut.

When the patient left the hospital

the uterus had contracted firmly and measured a fraction over three and one half inches in depth, occupied its proper position in the pelvis, and the patient is to-day entirely well, with perfect normal functions.

The following officers were elected:

Dr. Louis McLane Tiffany, of Baltimore, Md., President.

Dr. Ernest S. Lewis, of New Orleans, La., First Vice-President.

Dr. Manning Simons, of Charleston, S. C., Second Vice-President.

Dr. Richard Douglas, of Nashville, Tennessee, Treasurer.

Dr. W. E. B. Davis, of Birmingham, Ala., Secretary.

After introducing and adopting resolutions of thanks, the Association adjourned to meet in the City of Washington, D. C., the second Tuesday in November, 1895.

BUNCOMBE COUNTY MEDICAL SOCIETY.

Stated Meeting January 7, 1895.

Dr. J. A. Watson read a paper entitled

"TOTAL EXTIRPATION OF THE UTERUS FOR FIBROMA, COMPLICATED BY PREGNANCY." (See page 81.)

Discussion.

Dr. von Ruck: I regret that the pathological specimen has not been demonstrated in connection with the reading of the report, which would have given a better opportunity of judging of the necessity of extirpation of the pregnant uterus, instead of removing the tumor and allowing the pregnancy to continue. I would also

like to know how the author determined the death of the foetus, and whether he believed that the foetus was dead before he attempted to evacuate the uterus.

Dr. Watson: The attachment of the tumor to the uterus was such that, as the former sunk down into the pelvis posteriorly, it dragged the uterus upward anteriorly, so that traction was exerted upon the organ; thus the cervix was pulled up behind the symphysis, and, on opening the abdomen, the uterus was spread out upon the surface of the tumor. The attachment of the tumor to the uterus was so

broad and short, that I did not dare to attempt its extirpation in so decrepit a patient without controlling the hemorrhage by temporary elastic ligature around the cervix, which I feared would lead to the death of the fœtus, if it was alive, while, in addition, the very thin walls of the uterus made it certain that the organ would be opened by the removal of the tumor itself. The patient already had fever, and if I had opened the uterus containing a dead, and possibly decomposing fœtus, I am almost sure I would have lost the patient.

Dr. Reagan: I was present when the attempt was made to terminate the pregnancy, and believed at that time that it would be best to do this and afterward remove the tumor. No uterine contractions following and the patient growing worse, there was no other alternative than to proceed to abdominal section. Temporary illness prevented my presence at the operation, but from all I have known and learned of the state of affairs found, I think the extirpation was justified.

Dr. Whittington: I have seen the pathological specimen after its removal, and it did not impress me that the tumor could not have been removed without sacrificing the uterus. The attempt to terminate labor before operation had not resulted in the escape of the amniotic fluid, and therefore no contraction and expulsion could take place. If this operation was justifiable with so simple an attachment of its pedicle to the uterus, then all cases in which a fibroid tumor of the uterus develops rapid growth under the occurrence of pregnancy, would justify total extirpation of the uterus.

Dr. Watson: I have already stated my views as to the conservatism that should be practised in such cases—these are principles which may be discussed properly, but in the individual case existing conditions must govern us in our procedure. These appeared to me to be such that I felt justified in doing the radical operation as the only means of saving the patient's life.

Dr. von Ruck: After the attempt was made to procure abortion, and in the light of the extreme condition of the patient, with a dead fœtus in the attenuated uterus, the removal of the tumor would probably have resulted in opening the uterine cavity, undoubtedly a very serious complication, especially if the contents of the latter were the cause of the existing fever, and it is perhaps fortunate that the attempted abortion was unsuccessful and was quickly followed by the radical operation, for it is not likely that the uterus could have expelled its contents, especially not the placenta, even if the amniotic fluid had escaped and if contraction had thereupon ensued.

Dr. Watson: I am of just this opinion, and regret that I attempted at all to evacuate the uterus before the operation, and would not do so again under similar circumstances. After the abdomen was opened the patient's condition required a speedy termination of the operation if I would not have her die upon the table. I feared the loss of blood, and the thin uterine wall and its probably septic contents, and therefore extirpated uterus and tumor together, as the only safe way to prevent disaster.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

January 8, 1895.

The officers for the year 1895 were installed at this meeting—Dr. Wm. J. Gordon, President; Dr. Mark W. Peyser, Secretary; Dr. John F. Woodward, Secretary.

Dr. Hugh M. Taylor read the paper for the evening:

SURGICAL TREATMENT OF SPINAL TRAUMATISMS.

It is necessary for us first to classify what we are going to treat, and then determine how to treat it. The classification I shall make is (1) Anatomical, as traumatism of the cord, membranes, bony canal and ligaments; (2) Clinically or pathologically, concussion (sic) of the spine, contusions, hemorrhages, inflammatory deposits, cicatricial contraction and morbid changes incident to intra- and extradural injuries, fractures, dislocations and the train of symptoms following injuries to the nerves after they have left the cord. In order to apply intelligent treatment, it is necessary to differentiate between the manifestations of the different varieties of traumatism. It must be kept clear, that all the manifestations to treat are results of pressure, as from effusions of lymph, serum or blood-clot, bony fragments, cicatricial contraction, etc.

According to most authorities, concussion of the spine is a misnomer, as the cord is so well protected by a water bath, by being anchored by the nerves in the bony cavity, which is situated deep, lying in a mass of muscular tissue and held strongly together by ligaments. Injury while upright is

rare, it occurring when the spine is flexed, as in the bending posture. It is hard to realize that, with these natural protections, there can be such a condition as concussion. It is really a part of shock. If the symptoms extend beyond the time in which shock should be recovered from, contusion is present.

Take into consideration the important part that the ligaments play in traumatism of the spine—compare sprain of the spine with those of other parts, and we must conclude that sprains of the spine are frequent. Many of the so-called injuries to the spine are ligamentous, and not nervous. If a spinal ligament is torn or contused, it must be repaired by new tissue formation, which may affect probably the roots passing through, causing eneuritis and trophic, motor or sensory disturbances. The damage may be outside and yet be manifested above, e. g., long-continued neuralgia. Many of the so-called railway spines are simply such.

We do not often have the opportunity of studying contusions of the cord by post-mortems. We must study by analogy, knowing all the results due to pressure.

The most common morbid condition is hemorrhage, the cord being richly supplied with blood-vessels, and a contusion causing their rupture is not by any means rare.

It is important to differentiate pressure due to blood, serum or lymph: If the symptoms come on immediately, they are the result of fracture or dis-

location; if in two or three hours, they are the result of pressure from hemorrhage; if in a day or two, serum is the cause; and if the symptoms of compression occur after weeks, they are due to lymph effusion.

The manifestations of pressure are (1) of the cord proper, depending on the part upon which pressure is exerted; (2) of the spinal nerves, as interference with, or destruction of, their functions, as spasmodic contraction of the muscles supplied, paralysis, anæsthesia, hyperæsthesia, formication, etc. The symptoms are not only local, but remote; not only immediate, but subsequent.

It is not easy to say that the damage to a nerve is within or without the cavity. The reflex effects of nerve irritation are manifested at times when no plain explanation can be given. Mitchell and others say they are due to paresis of the higher centres.

Treatment.—The field of surgical treatment is limited, as when pressure from exudate exists. Traumatism of the ligaments are not within surgical limits. Massage and extension should be employed for these. For damage to the cord, iodides, mercury, rest, douche, massage and moral treatment, which is important.

The only classes of injuries calling for surgical treatment are fractures and dislocations. Cut down on the spine to remove fragments and relieve pressure; but this is not an easy matter. It is advised to bite off the spinal and then the transverse processes until the cord is reached, and then be guided by indications as to the presence of clot or effusion by the bulging, discoloration, etc.

It is conceded that the danger from hemorrhage or loss of spinal fluid is not as great as that of pressure.

Another method of treatment is absolute rest, extension to head and feet, and the use of sandbags.

The bladder must be cared for and bed-sores prevented. The reduction of fracture before operation is debatable, on account of the injury that may be inflicted in the process; and then it is doubtful if fracture or dislocation can be diagnosed without cutting down.

Dr. Mark W. Peyser reported the case of a man who, while mining, was struck on the back by a large mass of earth, resulting in dislocation of three vertebræ. Operation was of no benefit, and the man succumbed. He also said that statistics show that tapping the cord for the relief of pressure was unavailing.

When iron disagrees, it is usually because the dose has been too large. A single drop of tincture of chloride will often act as an efficient chalybeate, if given in a full tumbler of cold water after meals, when larger quantities will fail. The good effects achieved by the use of the various ferruginous waters possibly depend on the minute quantity and the thorough dilution.—*Exchange.*

POSTPONEMENT OF THE DERMATOLOGICAL CONGRESS.—Dr. Geo. T. Jackson informs us that the Third International Dermatological Congress will not be held this year, as proposed. It is possible that it may not be held until 1897.—*Boston Med. and Surg. Jour.*

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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Editorial.

TREATMENT OF VARIOLA BY ANTITOXIN.

Dr. J. J. Kinyoun, Past Assistant Surgeon of the Marine Hospital service, has made an interesting preliminary report (Abstract of Sanitary Reports) on the treatment of variola by antitoxin. It has been demonstrated by Maurice Raymond and Sternberg that the blood serum of an animal immune to vaccinia destroys the potency of vaccine lymph. If this neutralizing effect occurred outside the body why should it not take place within the body, and thus prove a valuable means of treating small-pox? Dr. Kinyoun has put this theory into effect in two cases of small-pox and has given the result—this report. On December 23, 1894, a liter of blood was taken from a heifer calf which had been previously

vaccinated on November 26. At the time of the bleeding the local effects of the vaccination had disappeared and the animal was, to all appearances, perfectly well and sound. As soon as the blood was withdrawn it was taken to the laboratory, where, on the next day, 350 c.c. of tolerably clear serum were drawn off. A part of the serum was transferred to a sterilized flask and a part passed through a special filter to remove all blood corpuscles and any chance bacteria that might have contaminated it. Experiment proved that both these samples had the power of destroying the potency of lymph, so that the antagonistic property must dwell in the serum.

In the treatment of the two cases of small-pox the filtered serum was used. The first case treated was a negro, aged 28, who was admitted to the hos-

pital December 21, with malignant variola. His condition on admission was very unfavorable, the eruption confluent, with high temperature and violent delirium. On December 25, there was considerable hæmorrhage in the pustules and much gastric irritation. On December 28, the patient's temperature was 99, pulse 120, respiration 32 and quite superficial. Urine contained ten per cent. of albumen. On this day at 10 o'clock 15 c.c. of serum were injected subcutaneously after thoroughly disinfecting the surface. The breathing became deeper, the temperature rose to 99.6 and patient very thirsty. At 2.30 another dose of 15 c.c. was given; a third dose at 9 p. m., and a fourth the next morning, making 60 c.c. in all. The patient grew constantly worse and died on the 31st. The second case was a negro, 20 years old, admitted January 5. Eruption had appeared five days before. Temperature on admission 99.8° F., pulse 98, respiration 24. Had considerable bronchitis. Fifteen c.c. of serum were injected at 11 a. m. An hour later temperature was 100.8, pulse 88, respiration 24, and deeper. At 5 p. m., 15 c.c. injected—temperature 102.2, pulse 92, and strong; respiration 24, of good depth. "Quite a notable change occurred in the pustules, which appeared to be losing their moist character, having an inspissated appearance, and quite a number of very small new pustules appeared in the healthy skin." At 3 p. m. 30 c.c. were injected, about half an hour after which patient complained of a difficulty in breathing. This passed off in the course of an hour. At 9 p. m. 30 c.c. more were given, which produced no ill-effects; temperature 102,

pulse 100, respiration 26; urine showed albumen, but in smaller quantity than before. "On the succeeding day there was a marked change in the eruption—all the former pustules now drying up—the smaller ones which appeared the day before seemed to have aborted. The general condition of the patient more favorable." No further treatment was given and the case was convalescent at the time of the report.

These cases were treated by Dr. Elliott, the physician in charge of the hospital, who states that he believes the administration of the serum in the first case prolonged life at least seventy-two hours.

Both of these cases were unfavorable, as the disease had progressed to the pustular stage before the remedy was applied, but it is certain that even at this stage it has some influence upon the eruption, for in the second case the eruption was so modified that there will be no, or very little, pitting. Dr. Kinyoun concludes that "since it seems possible to mitigate the attack of variola, it also appears rational to presume that the serum would have power to render susceptible persons refractory to the disease." We await the fulfillment of his promise to pursue his investigations along this line and incorporate the results in a forthcoming paper.

Dr. Annie W. Williams has been appointed as assistant bacteriologist of the New York Health Board. The steadiness, skill and precision which characterizes the sex in matters which they set their attention to, and their close attention to details and habit of routine well fit them for work of this nature.

Reviews and Book Notices.

Practical Uroanalysis and Urinary Diagnosis.

A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M.D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. With Numerous Illustrations, including Photo-Engravings and Colored Plates. In one Crown Octavo volume, 360 pages, in Extra Cloth, \$2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

The great importance of urinalysis in the diagnosis of pathological conditions and in pronouncing upon the fitness of applicants for life insurance is being recognized by the best medical colleges of the country, and work in the laboratory is now made obligatory upon those who graduate. It is one of those methods of precision which is a requisite for the physician who would be "up to date." In the words of the author: "As a rule, he who has accurately diagnosticated disease has already constituted himself its conqueror."

Dr. Purdy's long experience, extending over twenty-five years in this line of work, has eminently fitted him to write upon this subject. He has advanced some original matter and methods, though there is not much that is new. The great value of the work lies in the collecting together in the pages of one convenient volume the facts which, hitherto, lay scattered in the text-books upon various subjects, as well as upon the soundness of the author's teaching. The normal and abnormal constituents of urine, with the method of determining, and the

significance of each, are described in Part I., while Part II. is devoted to a study of the urine in various diseases. The Appendix is a special chapter upon Examination of the Urine for Life Insurance, and will prove very useful to those who are engaged in that class of work.

A Synopsis of the Practice of Medicine for Practitioners and Students.

By William Blair Stewart, A.M., M.D., Lecturer on Therapeutics; late Instructor on Practice of Medicine in the Medico-Chirurgical College of Philadelphia; etc., etc. Octavo, cloth, pages 433. E. B. Treat, 5 Cooper Union, New York. Price \$2.75.

This work is less than a text-book and more than a compendium. As its title indicates, it is a brief, condensed outline of the practice of medicine which will start the wheels of thought in him who reads.

Numerous methods of treatment are avoided and those mentioned which have received the highest sanction. The classification of the larger text-books, though objectionable to the author, is followed, and the history, etiology, symptoms, diagnosis and treatment of each disease are briefly discussed. Of course, in a book intended to be so condensed as this, objections must be found, but they are few. As an example, in describing the cold bath for the reduction of temperature, the author specifies that the patient shall be rubbed gently with a coarse towel after being removed from the bath, but does not allude to the very much more important point of *keeping up* friction of the surface of the patient's body all *during* the bath. He follows the larger text-books in giving promi-

nence to the 2-degrees rise of the evening and the 1-degree fall of the morning temperature as a diagnostic point in typhoid fever. We believe such a temperature cure is almost never seen in this

section and but rarely anywhere. As a whole the volume is very satisfactory and is well gotten up. The important points are italicized and there are no illustrations.

Abstracts.

URETEOTOMY.—Dr. Kelly (Johns Hopkins Hospital Bulletin) refers to three cases in which he resorted to this novel operation for the purpose of ascertaining the permeability of the ureter. The operations were for myoma uteri, carcinoma uteri and dense pelvic inflammatory disease. After the completion of the operations there was a fear that the ureter had been included in the ligature, as in each instance it appeared to be enlarged. To release a large number of ligatures and expose the patient to the risk of hæmorrhage, or to perform catheterization of the ureter would have been impracticable. He therefore located the ureter at the pelvic brim, snipped the peritoneum over its course, and made a longitudinal incision one-half cm. in length into the lumen, through which he passed a small ureteral sound into the bladder,

In two cases the ureters were found to be free, the enlargement being due to the pressure of the pelvic mass previous to the operation. In the third case the ureter had been enclused *en masse* with a large area of bleeding tissue in the pelvic floor. After the removal of the ligature the sound passed easily into the bladder. By this simple operation much time was

saved and all three cases had uninterrupted recoveries. For closing the slit in the ureter he used the delicate mattress suture in two cases. The third required four sutures on account of the persistent oozing of the urine. These sutures are very lightly passed into the outer coat of the ureter, not entering its lumen.

REMOVAL OF THE UTERUS OR DISEASE OF THE ADNEXA.—Prof H. C. Coe, (N. Y. Polyclinic) in some recent remarks before the Obstetrical Section of the New York Academy of Medicine, said he was formerly opposed to the removal of the uterus for disease of adnexa, but he is now rapidly coming to believe that it is clearly indicated in not a few instances. He presented a specimen which furnished another argument in favor of this position. The case was one of double ovariectomy, but the woman returned with severe hemorrhage from the uterus, which did not exist before the operation, and her second condition was worse than the first. Examination revealed a tumor connected with the left horn of the uterus, and which was diagnosed as a broad ligament cyst. He enucleated the uterus as far as possible, tying the few vessels that

were divided. He is rapidly coming to the opinion that the persistence of various symptoms, pain, hemorrhages and post-climacteric disturbances after the removal of adnexa is due to the fact that the uterus is left, and he therefore advises now that the uterus, when evidently diseased, should be removed.

ECZEMA OF THE AURICLE. — Dr. Gleason (*Medical Progress*) recommends in eczema of the auricle due to seropurulent discharge from the meatus, that the scabs be removed and the parts cleansed by the application of

peroxide of hydrogen on a cotton mop, after which an ointment, consisting of six grains of yellow oxide of mercury to an ounce of petrolatum, is rubbed into the skin. After cleansing, the canal should be dusted with boric acid, reduced to an impalpable powder.

THE VALUE OF DIFFERENT BRANDS OF PEROXIDE OF HYDROGEN.—Endemann (*Times and Register*) publishes the results of a study of the various brands of H_2O_2 , which are offered in the market. He has studied fourteen brands and tabulated his results as follows:

BRANDS.		Volumes of Available Oxygen.	Residue from 100 c.c. of H_2O_2 .	Acidity in c.c. of Soda Solution for 100 c.c. of H_2O_2	Baryta in 100 c.c. H_2O_2 .
No. 1.	John Bene's Peroxide of Hydrogen Medicinal.....	10.50	0.1886	2.19	None
No. 2.	Hydrozone.....	27.35	0.2180	3.11	None
No. 3.	Darkin & Scheffer's Peroxide of Hydrogen Medicinal.....	9.65	0.1206	6.75	None
No. 4.	Mallinckrodt's Peroxide of Hydrogen Medicinal.....	9.55	0.1408	1.43	None
No. 5.	Marchand's Peroxide of Hydrogen Medicinal.....	16.55	0.564	1.29	None
No. 6.	McKesson & Robbins' Peroxide of Hydrogen Medicinal.....	10.95	0.0540	0.44	None
No. 7.	Merck & Co.'s Peroxide of Hydrogen Medicinal.....	0.50	0.2418	4.57	None
No. 8.	Oakland Chemical Co.'s Peroxide of Hydrogen Medicinal...	10.50	0.0382	0.34	0.0017
No. 9.	Peuchot's Peroxide of Hydrogen Medicinal.....	10.60	0.4674	1.77	0.0018
No. 10.	Powers & Weightman's Peroxide of Hydrogen Medicinal...	8.40	0.0830	2.03	None
No. 11.	Pyrozone, 3 per cent.....	11.20	0.0534	0.76	None
No. 12.	Rosengarten & Sons' Peroxide of Hydrogen Medicinal.....	3.10	0.1002	0.25	None
No. 13.	Smith, Kline & French Co's Peroxide of Hydrogen Medicinal.	6.15	0.0880	2.6	None
No. 14.	E. R. Squibb's Peroxide of Hydrogen Medicinal.....	12.40	1.004	12.94	None

He considers sample No. 2 as far superior to any other brand which has ever been made, "not only on account of its large amount of available oxygen, but also owing to the presence of a small quantity of several essential oils, the respective nature of which could not be determined." Dilution of this brand with equal part of water gives a solution containing about 13.5 volumes of available oxygen and its bactericide power still remains about the

same as that of sample No. 5, which contains 16.55 volumes of available oxygen. Sample No. 14 comes next to No. 5, though the degree of acidity is too large for sensitive diseased mucous membranes. Sample No. 11 contains 11.20 volumes of available oxygen and is quite similar to No. 6, with the exception that the latter contains a small quantity of salicylic acid, which the author thinks impairs its keeping properties. The fourteen

brands all contained acid (phosphoric, sulphuric, muriatic), and peroxide of hydrogen should never be made neutral before using even in the most delicate cases.

A standard solution of H_2O_2 should answer the following tests: (1) It should contain at least 15 volumes of available oxygen; (2) the free acid contained in 100 c.c. should require not less than 1 c.c. and not more than 3 c.c. of normal volumetric soda solution to be made neutral; (3) it should not contain any soluble baryta salts; (4) it must be free from sediment. Brands No. 7 and No. 12 are valueless. Brands No. 8 and No. 9 are not fit for medicinal uses, as they contain traces of soluble baryta. Brand No 14, which is sold as a 10-volume solution, is really 12 volumes, but is too acid. Brand No. 5, sold as a 15-volume solution, is really 16.55 volumes, about 10 per cent. above the standard.

AN UNUSUAL HABIT.—Katzenbach (*N. Y. Polyclinic*) reports the following case: A watchman applied for relief from a colitis of four years standing. Fifteen years ago he was subject to severe attacks of cramp. In one of these attacks he was given some rock candy, and, after eating a small quantity, his pain quickly and miraculously vanished. Since then he has continued its use, being unable to break off from the habit. If deprived of it for even a short while, he experiences an extreme dryness of his mouth and fauces, in addition to abdominal pain, which only rock candy can relieve. He has lost all of his teeth. The Doctor does not consider his colitis (which was relieved by proper treatment) due to the ingestion of the candy.

CREOSOTE, HYPODERMATICALLY, IN FŒTID BRONCHITIS.—Dr. R. Werden (*Med. Week*) relates the following case observed by him as a striking example of the remarkably powerful prompt influence of creosote on fœtid bronchitis: The patient presented numerous fistulæ in the anal region, communicating with the rectum, for which he was operated upon. No ill-effects followed this operation until about a month later, when the patient was seized with fever, pain in the left infra-clavicular region, violent coughing and expectoration of a greenish-gray, very fœtid matter, containing bacteria and micrococci in abundance. This fœtid bronchitis, and the fever to which it gave rise, persisted unabated, in spite of inhalations of oil of turpentine, as well as internal administration of oil of anise and quinine. The patient was rapidly sinking, when it occurred to Dr. Werden to administer creosote hyyodermatically. He first injected (on the left side of the thorax) $1\frac{1}{2}$ cubic centimeters of a solution of beech-wood creosote in olive-oil, 1:14, that is to say, about 10 centigrammes of pure creosote. In the evening of the same day, the temperature, which before had been continuously 40° , fell to 38.8° C. The next day an injection of 3 cubic centimeters of the creosoted oil (20 centigrammes of creosote) was administered, with the result that the temperature fell to 37.7° C., the thoracic pain completely subsided and the cough expectoration and fœtidity of the discharge manifestly diminished. When two more injections of $4\frac{1}{2}$ and 6 cubic centimeters (30 and 40 centigrammes of creosote), respectively, each day, had been given, all the symptoms of the fœtid

bronchitis definitively disappeared. The patient had, consequently, in the course of four days, absorbed 1 gramme of creosote by hypodermatic adminis-

tration, without the least toxic effect. About ten minutes after each injection his breath smelled strongly of creosote. —*Amer. Med. Clin. Bull.*

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

January 24, to February 6, 1895: *Robertson, Capt. Reuben L.*, Assistant Surgeon. The leave of absence granted Capt. Reuben L. Robertson, Assistant Surgeon, is further extended fourteen days.

Kennedy, 1st Lieut. James M., Assistant Surgeon. The leave of absence on account of sickness granted 1st Lieutenant James M. Kennedy, Assistant Surgeon, is extended one month on account of sickness.

Stiles, 1st Lieut. Henry R., Assistant Surgeon. The extension of leave of absence on account of sickness granted 1st Lieut. Henry R. Stiles, Assistant Surgeon, is still further extended two months on surgeon's certificate of disability.

Morris, Capt. Edward R., Assistant

Surgeon. Leave of absence for 21 days, to take effect upon being relieved from duty at Fort Warren, Massachusetts, is granted Capt. Edward R. Morris, Assistant Surgeon.

THE NAVY.

Two weeks ending February 9, 1895: *Bagg, C. P.*, Assistant Surgeon, detached from U. S. S. "Mohican" and ordered to the Naval Hospital, Mare Island, Cal.

Brathwaite, F. G., Assistant Surgeon, detached from Naval Hospital, New York, and ordered to examination preliminary to promotion.

Stoughton, James, Assistant Surgeon, ordered to examination preliminary to promotion.

MARINE HOSPITAL SERVICE.

For the sixteen days ending Jan. 31, 1895:

Austin, H. W., Surgeon, to proceed to New Bedford, Mass., as Inspector, January 18, 1895.

Miscellaneous Items.

Dr. V. P. Gidney has resigned his professorship in the New York Polytechnic.

Dr. J. R. Alexander, formerly of Croft, N. C., is now located at Lucia, North Carolina.

A correspondent writing from Yuma, Arizona, says, in speaking of the temperature of that place: "They say a soldier died here once and went to hell—there's nothing remarkable in that—and in a few days reappeared and asked for blankets."

Antitoxine can be obtained from the following agents and manufacturers: Messrs. Schulze-Berge & Koechl, 79 Murray St., New York; Messrs. Lehn & Fink, New York; and the Pasteur Institute, New York.

The 20th Annual Meeting of the American Academy of Medicine will be held in one of the buildings of the Johns Hopkins University, Baltimore, on Saturday, May 4th, and Monday, May 6th, 1895. Members of the profession and others who may be interested in the topics treated by the

papers, are cordially invited to attend the open sessions of the Academy. A score of excellent papers have been promised.

Prof. Edwin Klebs, who has been at Asheville for several months, will begin soon the production of "antiphthisin" at the laboratory of Dr. von Ruck's Sanitarium. Antiphthisin is an extract of tuberculin, being claimed as the agent which produces the beneficial action of tuberculin, but is free from the tox-albumen that cause the unfavorable symptoms which have

brought tuberculin into disrepute. It can be given by hypodermatic injection or by enema, and is free from all danger. The dose is much larger than the dose of tuberculin.

We are in receipt of an interesting booklet, entitled *Surgery 200 Years Ago*. It contains illustrations and descriptions of surgical instruments and operations two centuries ago. It is sent out by the Antikamnia Chemical Co., and gives some of the therapeutic uses of their popular remedy.

Reading Notices.

CYSTITIS AND METRITIS.—W. Warwick, M.D., King's Coll. Aberd., M. R. C. S., Eng., 1851, L. M. Roy. Coll., Belf., 1849, etc., Belfast, Ireland, says: "I have given SANMETTO a very good trial in cystitis and metritis, and the results have been most satisfactory. I do not know another remedy which I can rely on for such uniform good results in affections of the genito-urinary organs."

RUSSIA'S EMPRESS GAINS STRENGTH.—The producers of "Mariani Wine" (Vin Mariani) should, according to report, soon have a splendid market in Russia for their nerve and brain tonic, as the Dowager Empress has, at the suggestion of the Princess of Wales, drunk it since the death of her consort, with the most remarkable and beneficial results. It seems that her Majesty is one of the many delicate persons with whom stimulating drugs like quinine, iron and Peruvian bark disagree, but such is not the case with the wine tonic referred to. It is well-known that the Princess of Wales also derived increased strength of brains and nerves from it during her last great trials. Moreover, in consequence of the benefits obtained by the Empress, a great demand for this tonic

has sprung up among ladies of Russian aristocracy suffering from nerves. —*The Court Journal*, London, January 12, 1895.

SUCCUS ALTERANS IN ENGLAND.—Dr. William Richard Goodfellow, M. R.C.S., Roche, Cornwall, England, L. S. A. (London Hospital, Surgeon Roche and St. Anstell United Mines), says: "I have used in practice the preparation known as *Succus Alterans*, and have much pleasure in bearing testimony to its great value. For diseases having their origin in a syphilitic source, I believe *Succus Alterans* to be the one reliable specific, for I may add that invariable success has been met with by me when prescribing the remedy in question, even after the failure of other alteratives. I shall continue to rely on the *Succus Alterans* in all cases I have indicated herein.—*Medical Reprints, London*.

Celerina and Aletris Cordial, equal parts, teaspoonful every four hours, will relieve ovarian neuralgia.

Headache in childhood is rapidly relieved by Celerina in doses of ten minims four times a day.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, MARCH 5, 1895.

No. 5.

Original Communications.

THE TREATMENT OF SQUINT IN THE YOUNG.

BY W. H. WAKEFIELD, M.D., Charlotte, N. C.

Every abnormal condition of any bodily organ owes its existence to some cause operating certainly in the past and possibly in the present. The wise physician, in treating diseased conditions or deformities of the body, seeks for the cause of these things with the view of removing it, or, failing in its removal, to counteract its effects.

It certainly should require no argument to convince a reasoning mind that the former procedure—the removal of the cause—is to be preferred to the latter—the mere counteracting of the effects of the cause.

It is a matter of observation that cases of Convergent Strabismus (eyes turned in) are more numerous among us than those of Divergent Strabismus (eyes turned out).

It is also a fact, well known to oculists, that many more of our American

people are far-sighted than are near-sighted. This fact had been observed by Donders before he made the announcement that far-sight is the cause of internal squint. Later, Stevens showed that weakness of the recti muscles has much to do with the causation of strabismus, and Savage has taken the theories of Donders and Stevens and shown how they act in concert to produce the conditions named.

It is now known that other causes must occasionally act in the production of squint, for cases of convergent squint have occurred in near-sighted eyes or in eyes having no refractive error, but the experience and testimony of many observers is to the effect that, while the theories of Donders and Stevens do not satisfactorily explain the occurrence of every case

of squint, they are true in the vast majority of instances. This being accepted as truth, is it not simple justice to our patients that operative measures be postponed, in the young, until the far-sightedness has been corrected a few months by means of glasses, and the strong, over-grown ciliary muscle reduced in power and activity by means of the combined action of the glasses and atropine? We expect hyperopia (far-sight) to diminish in amount as the child advances in years, and observation teaches that in some cases the squint grows less as the eyes approach the normal in refraction.

In these cases, if the muscles be cut before fitting glasses and waiting for their effect, the eyes will surely turn outward when the little patient approaches maturity; then the second condition is worse than the first.

In many cases of squint, under the age of 12 or 14 years, the muscles must eventually be cut to remove all the deformity, but in a greater number *no* operative measures will be needed if proper treatment by means of glasses, atropine and gymnastics applied to the weak muscles be commenced in time and properly carried out.

If hyperopia, associated with weak external recti muscles, cause convergent squint, the correction of the first by means of proper convex glasses, and the removal of the second by gymnastics directed to the weak muscles, would seem to be the rational means of treatment. It is tedious, but in my hands this treatment has resulted in such a high percentage of cures that I positively refuse to operate on young eyes without first giving it

a thorough trial. I can illustrate the method best by citing a few cases.

Case 1.—Annie —, age 13. She complains of severe headaches when studying—the left eye has been crossed inward for several years. Vision of right eye 20—20; vision of left 20—100; not improved by glasses in either eye.

Atropine was now used and vision was reduced in right to 20—100 and in left it remained as at first. With glass sph. plus 2.25 combined with cyl. plus .50 at axis 80° vision in right was 20—20. No glass improved the left eye. She was given for constant use before the right eye sph. plus 1.75 and cyl. plus .50. This was worn constantly and a 2-gr. solution of atropine was dropped in the eyes twice daily for two weeks.

Result.—In less than two weeks the eyes were straight and have remained so. The child is able to attend school and studies with comfort.

Case 2.—C. W., age 11. She comes with a history of headache if the eyes are used at near work. Cannot attend school regularly. Internal squint, the left eye turning in markedly.

Vision in right eye 20—30, while in the left it is reduced to mere counting of fingers at three feet. Atropine was used and vision in right fell to 20—100. With glass sph. plus 3.50 and cyl. .75, axis 130 it was 20—30. The left was not helped by any glass. A glass .50 less than full correction was given this child, and, as her parents were very anxious to send her to school, no atropine was used later. Her father writes four months afterward that the eyes are now nearly straight; that one must look closely to detect anything wrong with the eyes. I have no doubt if atropine had been used a month or so the eyes would now be quite straight.

These two cases were certainly not favorable for the trial of this treatment on account of each having one eye in which vision was very poor, but the results were very gratifying.

Case 3.—R. D., age 9. He comes complaining of headaches and inability to study. Internal squint. Vision is in right 20—40, in left 20—50.

Under atropine vision in right is 20—100 and in left 20—125. With glass sph. plus 3 and cyl. .75 axis 180 vision is 20—25 in right, and with glass sph. plus 3 and cyl. 1.25 axis 130 it is 20—50 in the left. Glasses a little weaker than these were provided him for constant use. He lost three days from school and his squint disappeared in less than a week. It returns when he removes his glasses. In this case gymnastics applied to the weak external recti muscles should be used, but as he is comfortable his parents desire "to try the glasses alone for a while."

Case 4.—Katie —, age 10. Comes with history of headache and inability to use the eyes long at a time in reading. Divergent strabismus, left eye turning out on looking at a distance.

Vision was in right eye 20—20, not improved by any glass; in left 20—50, and could not be improved.

Under atropine vision was 20—100 and 20—150 in right and left eyes, respectively. Glass sph. plus 2 increases vision in right to 20—20 and sph. plus 3 with cyl. 75 axis 90 makes vision in left 20—50.

She was given for right sph. plus .75 and for left sph. plus 1.25 with cyl. .75 axis 90 and instructed to wear them constantly. The weak internal recti muscles were exercised three times daily by means of Savag's exercise set of prisms. The result is all that

could be desired. In a few weeks relief from the headache came and the patient was enabled to study in comfort. The squint disappeared in about five weeks and has not returned. She continued to exercise these muscles nearly one year before it was deemed best to discontinue their development.

Other histories could be added to the above, but no useful purpose would be served. These illustrate the method of treatment. During the last two years I have entirely relieved the strabismus in fully 50 per cent. of all cases treated in the manner as set forth, while a decided reduction in the amount of the squint, so as to lead us to expect a final cure, has taken place in about 25 per cent. and of the remaining cases all were much benefited excepting one case. Of those not yet relieved but benefited, several have been under treatment too short a time to warrant giving up hope of a cure by these means and resorting to an operation.

After a squint has existed for several years and the patient has reached 15 or 16 years of age, it is, in my judgment, useless to attempt a cure without operating, but during the tender years of childhood and early youth operative measures should be deferred until the means set forth in this paper have been given full opportunity to correct the deformity.

DIPHTHERIA IN LONDON DURING 1894.—During the year 1894 there were 13,694 cases of diphtheria reported in London, with 3,195 deaths, as against 1,962 deaths in the previous year.—*Ex.*

SOME STATEMENTS AND QUESTIONS ABOUT THE ÆTIOLOGY AND TREATMENT OF MALARIA.

BY J. S. BROWN, M.D., Bear Poplar, N. C.

Finding that in my practice I meet with more cases of malaria than of any other single disease, and that my success with it has not been satisfactory, I wish to state the conditions and ask the advice of such members of the fraternity as have satisfactorily treated its various forms with their innumerable symptoms and complications.

My practice is in an undulating territory abundantly watered by creeks and branches which form a net-work over the surface, seldom allowing a square mile to stand in one undivided section. The ridges or highlands between the streams are usually from fifty to two hundred feet above the level of the creek beds. The cultivated area amounts to nearly half of the upland and perhaps to a larger part of the bottom land. Oak, hickory and pine forests are plentiful. Decaying logs and brush are seen on all sides, and leaves in all stages of decomposition cover the ground too thickly to allow the growth of much vegetation other than shrubbery, which has become much more dense since the introduction of the stock law. In the bottoms there is some ash, maple and willow timber, and a large quantity of shrubbery and briers and coarse weeds and grasses, in addition to abundant native meadow grass of good quality. Marshes of one-fourth to five acres and stagnant channels are not uncommon.

Perhaps one-half of the drinking-water is procured from bored wells. These are usually from twenty-five to sixty feet deep and curbed with heart-

pine. About one-third of the water is obtained from dug wells of similar depth and usually walled with rock. The remaining sixth of the water used is from surface springs at the foot of hills. The water from wells and springs is usually clear, cold and apparently as pure as that in the mountains. However, there are exceptions to this general condition. The well-water is seldom influenced by continued rains; but the water in many wells is one to four feet lower in the early part of autumn than at the beginning of spring.

Ordinarily the people on the ridges believed that their locations had given them immunity against malaria. In fact, chills and malarial fevers have generally been less prevalent in these higher regions; but during the past seven months we have suffered an unusual prevalence of malaria from which ridge-dwellers seemed no better protected than the inhabitants of lower lands.

In tabulating over a hundred and fifty cases, I find that about one-half used water from bored wells, one-third from dug wells and one-sixth from springs. This was contrary to my personal prejudice in favor of water from rock-walled dug wells.

Nearly three per cent. of these cases were fatal. Two died of pernicious attacks of less than two days duration. Three used water from bored wells; the other two used water from dug wells.

Of the whole number of cases,

nearly forty per cent. suffered a return of the disease within from one week to five months. Returns were more frequent in those who had suffered from the intermittent form, possibly because of less patient and thorough treatment.

My routine practice, from which there were many deviations, has been for the intermittent form: (1) A mercurial purgative. (2) Quinine in six-grain doses begun twelve to twenty hours before an expected paroxysm. (3) Acetanilide to modify the unpleasant symptoms after the paroxysm, and (4) A pill of iron, quinine, arsenic and strychnine three times a day for about ten days. In the continued forms and in some of the remittent forms quinine was given about every four hours. Besides these remedies, I have used with questionable success capsicum, piperine, hydrastine, hydrochloric and nitric acids, eucalyptus, iodides and other drugs. In a few cases of chronic malarial poisoning I think hydriodic acid gave good results.

The chronically enlarged viscera seemed to yield to its influence and return to their normal size and activity. Eucalyptus seemed to act favorably in cases complicated with disorders of the urinary-tract.

I wish to ask: (1) Is the method of invasion by the plasmodium malariae uniformly through the alimentary canal? (2) By what channels save by drinking-water does it usually effect an entrance into the system? (3) What constitutes the best prophylactic treatment aside from removal to non-malarial regions? (4) Can we rely solely upon quinine to effect a permanent cure? (5) If not, what other remedies are most reliable, either alone or synergistic with quinine? (6) How long should your most reliable remedies be exhibited in order to prevent a return? (7) What is the best method of procedure in a case of pernicious malaria?

I hope to be much benefited by the answers to these questions.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

February 12, 1895.

Dr. Landon B. Edwards was the leader in the subject for the evening,

THE THERAPEUTICS OF GOUT, URIC ACID DIATHESIS, GRAVEL, ETC.,

the whole subject of Gout, however, being open for discussion.

Dr. Edwards said: Poor man's gout is due to half-masticated food, washed down by draughts of heavy beer, and to lack of exercise. Gout may also be caused by lead. An excess of highly

seasoned food, in fact, excess of any kind, directly predisposes to it. The disease implicates oftenest the nervous system. Of course, it is directly due to the increased formation or diminished elimination of uric acid. There are strong reasons for attributing to the liver the chief part in the formation of urea. So long as this organ is active, the kidney carried it off; but if, for any reason, the kidneys and liver do not perform their duties, re-

tention of uric acid occurs and the result may be manifested in gout, regular or irregular, with its attendant symptoms; in the formation of tophi or calculi, renal or vesical.

Treatment.—Children of gouty parents must do more than live temperately, both as regards food and drink. They must take plenty of exercise. An indication for treatment is to prevent catarrhal conditions of the urinary tract. Use milk and an abundance of alkaline waters. In the growing child use firsh, eggs, cereals, etc. Avoid over-eating, especially highly seasoned food and dark meats. Clothing must be suited to the season.

Medicinal.—In the examination of the urine extractions should be looked for, as well as uric acid and albumen. For constipation nothing is better than cascara. In the beginning of the attack use moderate doses, 12 to 15 drops of the wine or tincture of colchicum seed night and morning. Aconite in drop doses may be combined with it. The action of colchicum varies according to idiosyncrasy, some people being able to take a teaspoonful without discomfort, while small drop-doses in others produce fatal effects; and in any event, the vomiting which may occur is objectionable. Salicylate of sodium is a specific in this disease and more—it assists in the elimination of uric acid first, and then prevents its further formation. It shows its virtue in preventing both acute and chronic gout.

During the intervals no one medicine excels iodide of potassium in small doses and at long intervals. For neurotic troubles, during the intervals, use dilute solutions of phosphate of sodium. Especial value is attributed

to the use of the lithium salts. I have confidence in the lithia waters, especially for the results of gout. I have no doubt that calculi can be reduced in the system and washed out by the urine. A case occurring in my practice is in point. The man claimed descent from noblemen. The father was a gourmand and beer-drinker, and his children had gout and renal calculus. In one child the latter was pronounced. Operation was decided. The diet was restricted, Buffalo Lithia Water prescribed, and in a few days the urine was better, calculi passed, all symptoms disappeared. and, so far as I know, never reappeared. The effect of lithium and allied salts is to alkalinize the blood. It is proved by authorities that waters containing even but traces of lithium possess solvent action on uric acid gravel and tophi. In one report 73 per cent. of the cases collected showed solution of stone, and in the balance crushing was facilitated.

DISCUSSION.

Dr. Hugh M. Taylor: Dr. Edwards said in order to be free of gout, one must be poor. Now, according to authorities, the rich man has gout, but his child is free from it; the poor man is free, but his child has it. The reason is, the rich man's child has his food carefully selected, is given opportunities for taking all the exercise he wishes and has no anxiety whatever. The poor man, although he eats indigestible, proteid food and drinks heavy beer, is obliged to labor for his living. This child is scantily clothed, lives in unsanitary dwellings and his food is not alone scanty, but indigestible. I have often been struck with the fact that

vesical calculus is uncommon in the negro, and can recall but one case in the whole race, and that was in my practice. The explanation is the same as in the case of the poor man, but I cannot understand why the child is exempt.

Dr. Jacob Micaux: I am struck by Dr. Edwards' statement as to the small quantities of salts acting favorably. If the doses are full, the stomach revolts, and especially is this true of the salts of lithium. We forget that we are injuring the digestive functions in giving large doses of alkali. The success of the mineral waters is due to the small amounts of the salts they contain and to the fact that patients take them instead of water.

Dr. J. S. Wellford: In the uric acid diathesis there is not sufficient metabolism. I contend that rheumatism and gout are but different phases of the same thing. I don't believe in the lactic acid theory, and I hold that lithæmia is a blood-poisoning due to uric acid, the same being true in the sequelæ of scarlet fever, and in dysmenorrhœa, most particularly in the latter, if the patient has gouty parents. In one case in my practice the patient was free during the reproductive period; but as soon as the menopause came on gout manifested itself. Whenever a person is making more nitrogenous matter than he can dispose of, gouty symptoms occur. The skin plays an important part in elimination, as do the liver, intestines, etc. If, for any reason, they do not act, extra labor is thrown on the kidneys and susceptibility to gout occurs.

My theory as to the cause of vascular and cardiac complications and sequelæ is, the lining membrane of the

left side of the heart and of the arteries is intended for alkaline fluid; that of the right side and veins for acid. As soon as the blood, for any reason, becomes acid, the arteries and left side are affected and we have arteritis, cardiac palpitation, angina and valvular trouble. We never have phlebitis in gout. As to the joints, they have less circulation than other parts of the body and the blood is less alkaline. They are therefore disposed to stagnation and deposit.

Anything producing increased quantities of nitrogen or lessened metabolism, creates gout. After the food is taken in, digested, assimilated, it is rendered effete and thrown into the venous system. Prior to, and during this time, it undergoes chemical changes and leucomaines are formed. Urea is the first of these, then uric acid, and, if indigestion occur, oxalic acid.

A number of people have gout because they do not take enough water, the uric acid being too concentrated.

In the *treatment* of gout I am of the opinion that mischief may be done in trying to relieve too suddenly by stopping elimination, and confirmed gout may result. Oil of peppermint is the best local application I have tried. It is soothing and aids in the solution of the acid. In constitutional treatment, don't use much opium, for the reason given above; it prevented elimination of the acid. Of the alkalies, the salicylates, to a certain extent, are the best, especially that of potash. I believe the mineral waters subserve a useful purpose by flushing, and am satisfied that I have saved myself frequently from attacks of gout by the free ingestion of water. Theoretically,

lithium ought to be the best article in gout; but, in my experience, I have not found it of half the value of potash, the urate of the latter being more soluble. All of the potash salts are diuretic; soda, colagogic. The main treatment should be in diet and exercise. The reason we have so much more gout now than previously, is to be found in the use of the street-cars, and, in the case of physicians, buggies. The diet must be regulated by the individual. No hard and fast lines can be set down. Let it be liberal. Diminish the nitrogenous food and liquors, or if the latter must be used, give good whiskey. Use carbohydrates.

Dr. Mark W. Peyser referred to the connection between the leucocytes and uric acid. The acid is related closely to the extractives xanthin, sarkin, guanin, adenin, etc. Spleen nuclein does not contain uric acid nor these, but it does contain the mother-substance from which they may be made; the acid being formed in the presence of an oxidizing substance, the others being formed in its absence. The nuclein is derived from the colorless corpuscles and the amount of urea and uric acid formed is a measurer of nuclein metabolism. Any condition, then, which produces leucocytosis, increases the production of uric acid. Hence, we see it when a large amount of proteid food is taken in, in leucocythæmia, phosphorus poisoning, acute febrile diseases (especially pneumonia) in infants, pernicious anæmia, etc.

The Doctor referred to the intimate relation existing between gout and diabetes mellitus and Packaid in Hare's System of Therapeutics, was quoted in regard to it. This authority cites a table, given by Charcot, showing that

in three generations of one family the first contained a gouty individual, the second four gouty and four diabetics, and the third one gouty.

Dr. E. C. Levy mentioned a case illustrating the effect of diminished ingestion of liquids, which was speedily relieved by the free use of water.

The reason that carbohydrates are not advised, said the Doctor, is because of the large amount of oxygen required for their oxidation. He has had good results in the use of piperazine.

Dr. Edwards, in closing the discussion, said that, beginning with 1875, we could trace developing cases of gout. From 1860 to 1875 it was rare to hear of it because of the struggle necessary for livelihood.

Piperazine has been tried and found wanting, clinically. The chemist, in his laboratory, found it perfect. Medical treatment should be tentative; anemas being given in small doses. Large doses of colchicum cause stomach troubles and are not inapt to produce death. I am, he said, in accord with Dr. Wellford as to relieving too suddenly. The salicylates act as solvents, and not as the physiologists wished them to do. They are, by far, the best remedies in the production of cure. As to diet, avoid tomatoes, on account of the oxalic acid contained in them.

The presence of uric acid in the blood, greater than 1 to 6,000, will cause its precipitation and gout—1 to 7,000 gives rise to the formation of crystals and the manifestation of gouty symptoms. Beyond this amount, it has no effect. Dr. Wellford spoke of uric acid as a leucomaine. According to Roberts, hypodermic injection of it does not produce gout, and he (Roberts)

says it is the mechanical action that gives rise to disease.

REPORTS OF CASES.

Dr. Michaux said he reported the following merely to go back to the subject for the evening's discussion:

Male.—The first attack had been so sudden and severe that the patient thought he had been bitten by a spider; but subsequent attacks showed the nature of the malady. The diet was regulated, but the patient was imprudent. Finally, salicylate of sodium, with small doses of colchicum and

aconite, was administered, and the case progressed favorably.

I am of the opinion, said the Doctor, that colchicum should be given in moderate doses short of its purgative action.

Speaking of the injection of uric acid, I should hardly expect it to produce gout in the healthy individual, because the blood is alkaline and all the emunctories are in perfect action.

In threatened attacks I have employed free purgation, with salines, with happy results.

THE LOUISVILLE (KY.) SURGICAL SOCIETY.

Dr. W. L. Rodman read a paper entitled

FRACTURE OF THE ANTERIOR SPINOUS PROCESS OF THE ILIUM FROM MUSCULAR CONTRACTION.

This young man, 17 years of age, while playing foot-ball ten weeks ago, sustained a fracture of the right anterior superior spinous process of the ilium as a result of muscular contraction. It was one of the plainest cases of fracture that I have ever seen; you could take the process and move it to and fro at will; there can be no question whatever about the diagnosis.

While I have seen a great many fractures about the pelvis as a result of crushing violence, this is the only case which has occurred in my own practice or in the practice of any of my friends, so far as I know, as the result of muscular contraction. Investigation of the subject shows that these cases are exceedingly rare, very few of

them being upon record. I believe the fracture in this case is plainly due to contraction of the tensor vaginæ femoris muscle. The history is that he was running rapidly at the head of the "pack" of foot-ball players, when he felt a sharp pain at the point of fracture and found that he was unable to walk and was taken home. He had not fallen and had received no blow in this situation, so that the fracture was clearly from muscular contraction.

The next paper was a report of a CASE OF FRACTURE COMPLICATED WITH HIP DISEASE,

by Dr. Ap. Morgan Vance.

Ten days ago I saw a man æt. 42 years, who was the subject of chronic hip disease, with ankylosis of the hip at right angles, with adduction very marked, with four or five inches shortening as a result. He was kicked by a horse on the inside of the knee, the

shoe opening the knee-joint. Quite an excessive hemorrhage occurred, probably from one of the articular vessels, also producing a fracture of the thigh at about the junction of the lower with the middle third. But the point to which I want to call particular attention is the difficulty experienced in applying the proper treatment. The relationship of the pelvis prevented any plaster dressing being applied except to the groin, and necessitated his remaining in the sitting posture, because if we had extended the limb it would have been necessary to have raised it up at right angles to the trunk, otherwise an angle would have occurred at the point of the fracture. I put on a plaster dressing from the groin to the lower third of the leg with Buck extension, and have kept the man sitting up since that time. The wound of the knee-joint discharged a great deal of synovial fluid, much more, I think, than the natural contents of the joint; a great deal of blood was also extravasated.

The man has gotten along for ten days without a bad symptom. I redressed the leg on the eighth day, and the wound of the knee-joint had closed perfectly without any inflammation at all. It is the first fracture I have ever seen complicated in this way, and the difficulties in giving it proper care were very great.

DISCUSSION.

Dr. H. H. Grant: Did the man have any use of his leg?

Dr. A. M. Vance: He could walk reasonably well. He is a livery-stable-keeper and a very active man. The wound of the knee-joint was, of course, a very severe injury in itself, but it has

been very difficult to manage the fracture on account of its being complicated with the old hip trouble.

I hope to keep the patient quiet long enough for union to take place. I do not know now I could have managed otherwise than I have done; I might have kept him on the side, but this would have been very irksome.

Dr. W. L. Rodman: I happen to have seen this case, being the surgical representative of the Accident Company in which the man was insured. It is certainly a very remarkable case, and one very difficult to treat. I am glad that he is getting along so well as the Doctor states he is doing.

Dr. A. Morgan Cartledge reported the following case:

FRACTURE OF THE THIGH.

Sunday morning I was called to see a case of fracture which presented a peculiar condition. A boy, in climbing up on a wagon, had become entangled in a wheel, and his thigh was broken; he was taken to his home and I saw him about an hour later. The remarkable attitude of the leg was the first thing that attracted my attention; the boy was sitting on the side of the bed and his leg presented at almost right angles with his thigh laterally. He had not been undressed when I arrived; I cut his pants and ripped them up, and was uable to discover the slightest break in the skin, although it was enormously distended on the inner side. There proved to be a very curious condition of affairs. Evidently fracture of the epiphysis had allowed a separation at the lower extremity of the femur, so that the inner condyle was entirely separated, allowing the leg to turn out at right angles; as I

say, the internal lateral ligament had been so put on the stretch that this loose fragment was very difficult to reduce, as is often the case after fracture of the femur and separation of the epiphysis. But after flexing the leg it came out very nicely, and the loose fragment of the inner condyle was put back in position. The leg was then put up in the usual dressing. It is the second case I have seen where there was fracture of the inner condyle, allowing separation in this manner.

DISCUSSION.

Dr. W. O. Roberts: Was there a rupture back into the popliteal space?

Dr. A. M. Cartledge: There was an immense hematoma on the inner side, and in moving the boy to the table I was very careful, as I did not wish to cause it to break through the skin.

Dr. H. H. Grant: Was the external condyle displaced?

Dr. A. M. Cartledge: The external condyle was slightly displaced, but I succeeded in replacing it.

Dr. William L. Rodman presented the next paper, as follows:

INCOMPLETE EXTERNAL ANAL FISTULA.

I have recently had under observation a case which is somewhat unusual.

It was a case of incomplete external anal fistula, which was operated upon a few days ago, the first one I have seen for some time. After the most careful examination on two occasions, I failed to detect any internal opening, and at the operation, when a careful dissection was made, none was discovered. I simply mention the case as being rather unusual, the first I have seen for several years. She was once unsuccessfully operated upon at her home in Texas.

DISCUSSION.

Dr. W. O. Roberts: What operation did you perform?

Dr. W. L. Rodman: I made it a complete fistula, just as I believe Dr. Mathews has always done. I have always operated by this method where there was an incomplete fistula, making a careful dissection down to the gut.

Dr. J. M. Mathews: I would only say that I have taken the position very often, and I think it can be maintained, that a great many fistulæ exist without any internal opening. I have never been anxious about the internal opening; if one exists it can easily be found at the time of the operation. Had there been one in the case Dr. Rodman reports, he would have found it at the operation.

Selected Papers.

DEFECTS IN SURGERY AS TAUGHT AND PRACTICED AT THE PRESENT TIME.*

BY ALEX. J. C. SKENE, M.D.

It occurs to me at this moment that the title of my paper should have been

*Read before the Medical Society of the County of Kings, April 17, 1894.—*Brooklyn Medical Journal*.

"Defects in Operative Surgery as Some of Us Teach and Practice it at the Present Time." It would savor of arrogance to criticise the work of all others in a branch of the healing art

which is at this time upon the crest of the highest wave of progress. But it may be proper that I should call attention to some of the imperfections of my own efforts. And if, perchance, there are others who have been doing as I have done, they will enjoy the interest which comes from having company on this occasion. I may claim to be in some degree prepared for the task of the present hour, by my experience. The most unkindly disposed, I feel sure, will grant that I have done my share of poor work, and I hope that I have profited by my failures. I may say to those who have the good fortune to be satisfied with their own achievements, that they will find an opportunity to point out to us who are less fortunate the means and ways to higher attainments.

The lack of dexterity and accuracy, which leads to slow and consequently imperfect operating, is the most noticeable defect of our times. Rapid operating is essential and imperative. Every moment wasted in an operation is a detriment to the patient as well as the surgeon. Operations that are quite well done are done quickly, as a rule. Slow operating is generally imperfect. It is often said that a quarter of an hour, more or less in the duration of an operation, makes very little difference. This I conceive to be a very great error, and I desire to submit some reasons for the belief which I entertain, in order that they may meet your approval or condemnation.

Rapidity of operating is especially necessary in order to avoid prolonged anæsthesia. All anæsthetics are injurious and tend to retard recovery from operations and impair the health of patients subsequently. The longer one

is kept in a state of anæsthesia the more harm is done. I remember that the celebrated Frank H. Hamilton was very positive in his views on this subject. He laid great stress upon the effect of anæsthetics in retarding recovery. I heard him say that when his two sons went into the army he told them that, if they had the misfortune to be wounded, and required surgical treatment, he hoped they would be brave and submit without an anæsthetic.

Patients in fair general condition will take care of ligatures and bruised tissue, but there is a limit to this reparative power and the less that it is taxed the better, of course.

Again, time is precious, because the longer the tissues are exposed and the more they are handled, the more slowly and imperfectly they heal. Tissues exposed to the air for an hour or more begin preparation for healing by granulation, and are therefore less capable of uniting by immediate union. The sooner that incised tissues are brought together, the less time it will take for them to unite. Tissues that have been bruised and lacerated by rough handling, are likely to break down and become necrotic, and hence union will not only be delayed, but there is a decided danger of suppuration occurring, although the operation may have been most thoroughly aseptic. In the dressing of such wounds in which the tissues have been injured, it is necessary to employ drainage in order to avoid suppuration and sepsis, and this renders an operation to a large extent defective. Especially are non-union, suppuration and sepsis likely to follow if the patient has been intoxicated for a long time by the use of the anæsthetic;

and, unfortunately, prolonged anæsthetics and unnecessary injury of tissues usually come together. These views regarding results, which I claim are apt to follow delayed or slow operations, are based upon my own observations, and being well aware that many surgeons may take exception, it may be well to add some of the reasons upon which my opinions are based.

First, it has been observed that some surgeons who are not very cleanly, but do their work quickly and accurately, obtain nearly as good results as those who are thoroughly aseptic in operating, but slow, awkward and defective in technique. This has led some to disregard sepsis and antiseptics, and is the only reason that I can find for their ignoring these essential principles of modern surgery.

Further evidence against delay in operating has been obtained from a careful study of certain results which are not, as a rule, brought out in the statistics of operations that are usually published. I feel somewhat confident that defective statistics have led surgeons astray by showing the great gain through modern methods, chiefly aseptic and antiseptic management, but at the same time keeping out of sight certain evils which have come with them. As soon as the germ theory of disease was fully evolved, the majority of surgeons contented themselves in successfully battling with these germs which interfered with the healing of wounds; and in many cases, no doubt, this aseptic practice has been pushed to the extreme and to the exclusion of other essentials in successful operating. Most of our statistics are based upon the death-rate after major operations, and they show what wonderful pro-

gress has been made in this age in the way of saving life and relieving suffering. But the difference in the time of convalescence and the degree of health restored are seldom noticed. Now, we all know that two patients may survive a certain operation, but one is restored to perfect health in a few weeks, and with very little suffering, while recovery in the other is twice or three times as long, and ultimately his health is not completely restored. This difference between the results of the best surgery cannot be determined by the death-rate, but by the difference in the time of convalescence, and the degree of health attained should be taken into account. One who is kept in misery and suffering for an unnecessary length of time, because of defective surgery, may be considered dead for the time being. Certainly the time that one is disabled and suffering should be deducted from his time of life and placed to his credit as time after death. Imperfect recovery after operations is familiar to those who have seen a number of subjects who may have been reported cured, simply because they survived operation, but really are as miserable as before losing portions of their structures. It is only by weighing carefully all the facts, that one can compare the results of good surgery with that which is imperfect. From such data I have drawn the conclusions now presented.

Within the last thirty or forty years surgery has advanced faster and further than anything else in our profession, and not in the science only, but in the useful and life-saving. At the same time the art of operating has been stationary, and if the work of all operators is taken into account, it has

decidedly lost ground. I will hazard the statement, for the sake of provoking discussion, that surgeons, taken in the aggregate, do not operate as well as they did before the age of anæsthetics and aseptics. Far more operating is done, better ultimate results are obtained, and more lives are saved, and much suffering is avoided, but not from better operating, but other improvements. Operations at the present time are frequently studies in surgery, upon the living subject, the operator learning how to manipulate as he proceeds with his work. This was not possible before the discovery of anæsthetics; and although the results are often fairly good when done by the student in surgery, they are not what they might and should be. A study in art, laboriously produced after many trials, is far from being equal to a well-finished work by a master, who makes every touch effective. That this subject stands as it does at the present time is due to several causes, which may now be considered.

The introduction of anæsthetics and the knowledge of the germ theory in the etiology of disease are of inestimable value, the one in lessening human suffering, and the other in saving human life. Still I repeat that they are, I believe, responsible for much imperfect surgery. Along with the triumphs of modern surgery there is intimately interwoven, and perhaps growing out of this, the much-to-be-regretted fact that dexterity and accuracy in operating at the present time do not equal that of the age before æsthetic and aseptic surgery. The older surgeons, knowing well that a conscious patient would not bear the slow experimental practice that we

sometimes see at the present day, thoroughly qualified themselves, by practice upon the cadaver and otherwise, to operate with rapidity and accuracy. To-day the surgeon does not hesitate to operate upon the anæsthetized subject, although he may not be very sure of what to do or how to do it. While this by no means applies to the consummate surgeon at the present time, it holds true with many of us.

Again, since the introduction of antiseptic surgery, with its marvellous results, the surgeon is enabled to undertake exploratory and experimental operations which no one would have dared to do a few years ago. The field has been rapidly enlarged, and hence there has been more room for the defects, and the power to act has hardly kept up in growth with the extension of the field of action.

I fully appreciate all the advantages of cleanliness in surgery, but there is little doubt that it is not yet perfect, and even when adopting the most approved plans and carrying them out in every detail, so far as it is possible, there are still loopholes through which germs may enter and mar or modify the surgeon's work, and if it is granted that there is the slightest possibility of septic infection in general practice, it follows that the danger is increased in proportion to the time of exposure of wounds. The surgeon can hardly feel safe under any circumstances in leisurely doing his work. The scrupulous care that is necessary in managing instruments, patients, assistants and the surgeon himself, renders this part of operative surgery exceedingly intricate and complicated; so it is almost impossible to secure absolute protection,

although the rules of aseptic surgery are accurate in themselves. Imperfection here arises from the endless detail necessary, which in itself makes it difficult to attain perfection.

There is still room for improvement in the way of simplification. Perhaps the most important element in the process of making things clean is the sterilization of instruments, sponges, operating room, everything which comes in contact with the subject operated upon, and were it possible to sterilize patients, their clothing, assistants and the surgeon himself, inside and out, a greater degree of safety would be practicable, but as that is difficult, there is yet room for improvement in this respect.

In the way of illustration, I may refer briefly to the matter of cleansing the hands of the operator. The very fact that there are so many ways recommended and practiced is rather an evidence that none of them is perfect. Perhaps Kelly's method is as near perfection as anything that has been offered, but that imposes such a burden and task upon the surgeon that, if he has much to do, as he certainly ought to have to acquire skill, his time and his hands very soon become used up. One of the torments of the surgeon is that his hands become so rough that if they are cleaned they never can be made to appear so, and certainly they are very uncomfortable to the possessor if he is required to operate many times every day. Some easy way of sterilizing the hands and keeping them in good condition has probably yet to be discovered. For the present I content myself with thoroughly scrubbing and washing my hands in soft-soap and running water; by so doing the

hands can be freed from all germs except those that are deeply imbedded in the skin or that may exist in the water supply. Germs can never be removed by any amount of washing and scrubbing in a basin of water, even if the water is changed many times. The running water does the work most effectually. After the washing the hands are immersed in a 5 per cent. solution of carbolic acid with about 20 per cent. of glycerine; the glycerine protects the hands from the caustic effect of the carbolic acid, and yet does not deprive the acid of its germicide effects.

I have only alluded to this subject to call attention to the fact that all these methods of guarding against germ infection in operating take so much time and involve so much detail that there are many chances for mistakes, and so the best may be still considered defective.

Viewing the matter from this standpoint, it appears that aseptic surgery is in part responsible for some inattention to manual and ocular training, so essential to good operating. These are, however, mixtures of good and evil, which must go together for a time, but in which the good so far surpasses the evil that we have every reason to hope that the evil will be eliminated in due time.

Another and less tolerable cause of defects, which arises through necessarily extending the domain of surgery, is the disposition of some men to strike out into new fields in the hope of suddenly gaining renown and rendering valuable service to the community. In the near past, and perhaps even, to a limited extent, at the present time, surgeons are often observed trying to

devise new operations and to modify, in the hope of improving old ones, while they are in black darkness regarding how to perform many of the operations that are known to be quite efficient and well-established by surgeons of the past and present. We forget sometimes that it is better to master the old and tried than to seek for something new and doubtful. The progressive surgeon should seek new operative procedures to meet certain indications heretofore unprovided for. He may also try modifications of old and well-established methods in the hope of improvement, but not until the old and tried things have been mastered and found wanting.

Another avenue through which defects occasionally creep into surgery is the endeavor on the part of some to cover altogether too much ground. If one endeavors to wrestle with the whole field of operative surgery, he finds such a number and variety of operations to do that one life is not long enough for him to perfect himself in them all. No doubt surgeons are sometimes compelled to do everything that comes to them. In the country and smaller cities specialists can hardly be developed, but in cities it is a fact that one can limit his field of action, and by so doing attain a perfection otherwise impossible. It is hardly possible that any one musician could become an expert performer on all the instruments of the orchestra. Even the leaders are incapable of acquiring such extraordinary versatility.

"The most insignificant man can be complete if he works within the limits of his capacities, innate or acquired; but even fine talents can be obscured, neutralized and destroyed by lack of

this indispensable requirement of symmetry. This is a mischief which will often occur in modern times; for who will be able to come up to the claims of an age so full and intense as this, and one, too, that moves so rapidly." —*Goethe*.

I come now to the first part of my subject, as announced in the title, and that is, Defects in Teaching Surgery.

Since the days of Hunter and Syme, who first introduced the rational methods of teaching, clinical surgery, the knowledge of surgical diseases and injuries has been gradually developed and taught in a way that, in the main, has been very satisfactory. The subjects of diagnosis and indications for treatment have been well taught, and not until very recently has there been any falling off in the knowledge imparted in these departments. I presume that since this extraordinary age of operative surgery there has been a little less attention given to the questions of diagnosis and preparatory treatment than heretofore. This lapse has been aided by the fact that exploratory operations have been rendered justifiable and necessary for diagnostic purposes. It is just possible that this has been pushed a little beyond its legitimate limit. In fact, I have observed that, if one who is really skilled as a diagnostician fails to discover the real nature of a surgical disease, and makes an exploratory operation to complete his diagnosis, he is very liable to fail after all. In fact, it takes a much greater experience and a knowledge that is much more difficult to obtain, to make a diagnosis after a surgical operation than by the physical signs and clinical history, the basis of all diagnosis in former times.

It is mostly, however, the methods of teaching operative surgery that are most defective. It must be admitted that surgeons are to some extent like poets—they are born. But, unlike poets, they can be made, to a very large extent, by proper training. One must possess, by inheritance, good perception and co-ordinating power, in order to become a good operator; in other words, the artistic temperament, with mechanical gifts. Possessing these, the student, by proper training, can be made efficient. The greatest defect, it appears to me, in our methods of teaching surgeons, is inattention to manual training. A department of manual training has been established, I understand, in our public schools, or is to be established, in which good handicraftsmen are to be brought up. A similar department should be introduced into all our medical schools, so that students can be thoroughly drilled in the manual and mechanical art of surgery. Dissection, as now practiced, simply teaches anatomy. It would be better if more attention were given to the method of dissection, drilling the student thoroughly in the use of the knife and forceps and the handling of tissues.

Again, the practice of surgical operations upon the cadaver should be carried out to a far greater extent. I am inclined to believe that at this time, when infinitely more surgical operating is done than years ago, the practice of operations upon the cadaver is not practiced to anything like the extent that obtained in the past.

Another defect in teaching arises from surgeons endeavoring to teach

themselves and electing their own course of instruction. According to the natural evolution of surgical education, one should begin with minor operations and proceed to the major; but in many cases the order is reversed, the aspiring young surgeon beginning with the most difficult and dangerous, which certainly is not calculated to give the best results. To begin at the top of the ladder and descend is pretty sure to lead one to failure, while beginning at the first round and carefully climbing surely leads to better and brighter attainments. The teachers of surgery are certainly not responsible for the mishaps of those who choose to take their education in this way. One could hardly believe it possible that educated men could drift in such wrong directions; but I am sure that I have seen, and I have no doubt many of you have seen, men wrestling with the most difficult and dangerous operations, while actually they could not dexterously and neatly vaccinate a baby. A thorough drilling in manual dexterity in dissection and in minor operations, leads one to a point where he can benefit by witnessing experts operating. Much, indeed, can be taught in this way by example. Next in order should come assisting master operators, which is one way of obtaining practice.

One of the difficulties of the present time is to obtain assistant surgeons who will stick long enough to their work to become of value to their chief or obtain sufficient experience to enable them to do good work when they undertake to play the principal's part.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR

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This JOURNAL is published on the fifth and twentieth of each month, and any subscriber failing to receive his copy promptly, is asked to announce the fact to this office.

Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

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Editorial.

THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

The time for the next meeting of the State Society is getting near at hand, and it is time that those who anticipate presenting papers at the meeting in Goldsboro, on the 14th of May, were getting them in proper shape. The last meeting may be said to have been a successful one, both as to the number in attendance and the amount and quality of the work done. We trust that the coming meeting may be no less so. The amount of work done at the last meeting is evidenced by the greatly increased size of the Transactions, which make a volume nearly double the size of that of the preceding meeting, and considerably larger than any volume the Society has ever pub-

lished. Notwithstanding this there were several papers, among them some very excellent ones, that were omitted, simply because the authors failed to deliver them to the Secretary. Authors of papers should remember that the laws of the Society require papers to be delivered to the Secretary before it shall be in order to refer them to the Publication Committee. Therefore if it is the desire of the author of a paper that his paper be published in the Transactions of the Society, he should deliver it to the Secretary immediately after reading it. Much unnecessary delay in publishing the Transactions is due to the holding back of papers by the authors.

The rule adopted at the last meeting to limit the reading of papers to twenty minutes, and to allow any

member only five minutes in the discussion, was a good one, and should be adopted at the coming meeting. There was one thing it developed, viz: that members had not learned the art of boiling down their essays. With the experience of last year fresh in their minds, they should succeed better this time.

The Society should include in its membership every reputable physician in the State, and each member should have the welfare of the Society at heart and use his influence to enlist as members those physicians of his acquaintance who have not before seen the importance of it. This is not simply for the sake of numbers, but that because when the whole profession is united they can exert greater influence, not only upon the Legislature for the enactment of wise and beneficent medical laws, but also upon the minds of the people at large.

We look with interest for the report of the Committee appointed at the last

meeting to consider the advisability of establishing the office of permanent Secretary, whose duties it shall be to receive and care for the exchange transactions from other societies and such other volumes as may be presented to the Society. The papers contained in these should be indexed, that they may be at the service of any member who may desire to refer to them, he paying cost of carriage both ways. Such a library as would be accumulated in a few years would prove of great service to members preparing papers upon special subjects and desiring to read the views of others.

The profession of Goldsboro, who showed so much earnestness in pressing their invitation for the Society to meet with them this year, will, without doubt, ensure a successful meeting, as far as the local arrangements are concerned, and we hope that the members of the Society will do their part in making the meeting useful as well as pleasant.

Reviews and Book Notices.

The Principles of Surgery and Surgical Pathology. General Rules Governing Operations and the Application of Dressings. By Dr. Hermann Tillmann, Professor in the University of Leipzig. Translated from the Third German Edition by John Rogers, M.D., New York, and Benjamin Tilton, M.D., New York. Edited by Lewis A. Stimson, M.D., New York, Professor of Surgery in the University of the City of New York. With 441 Illustrations. Octavo, 800 pages Cloth. D. Appleton & Co., New York, 1894.

As a reason for presenting a translation of this German work to English-speaking surgeons the translators call

attention to the fact that even the most recent surgical text-books in the English language have adhered, in the main, to the old division and arrangement of their subjects, and instead of adding to the general group of inflammations, surgical complications and general surgical diseases, the kindred subjects of the general surgical injuries and diseases of the various tissues, they have separated the latter and combined them with the study of their numerous and varied local forms in regional surgery. On the other hand, the Ger-

mans have divided their text-books into the "general" and the "special," including in the former not only the general affections and pathology, but also the pathology and principles of treatment of the injuries and diseases of the various tissues, and confining the latter to the consideration of their local manifestations in regional surgery. The space given to general surgery in the best-known German text-books is nearly or quite equal to that given to both subjects in ours.

We are not surprised, then, to find how thorough and full is the work before us, and that it makes a volume of eight hundred royal octavo pages. We have here just what the student of surgery needs, and which he fails to find in so many text-books—a close and full study into the principles that should govern him in the treatment of surgical cases, not omitting attention to the small things, an observance of which to the experienced surgeon seems so natural that he is apt to take it for granted that they will come intuitively to the student.

The First Section treats of the General Principles Governing Surgical Operations, and gives minute and up-to-date instructions for the preparations for the operation, the administration of the anæsthetic, the prevention of hæmorrhage, the drainage of wounds, etc. The last two chapters of this section are devoted to amputations, disarticulations, resections and plastic operations. In the discussion of anæsthetics we note that the author gives credit to Dr. Crawford W. Long, of Georgia, for having performed the first operation under ether narcotism; but Dr. Long's name has been contorted into "W C. Lang." And in

describing the various methods of preventing loss of blood, we fail to find any reference to Wyeth's device for bloodless amputation at the hip-joint.

The Second Section is devoted to the application of surgical dressings, and is thoroughly illustrated.

Section Three is divided into five chapters, discussing Inflammation and Injuries; Injuries and Surgical Diseases of the Soft Parts; Injuries and Surgical Diseases of Bone; Injuries and Diseases of Joints; and Tumors. This section is especially interesting, including, as it does, the pathology and therapy of the wide range of disease that come within its scope.

The mechanical work upon the volume is most excellent.

Health Sanitation and Climatology of the Southern States.

The first number of this quarterly magazine has come to our table and it is a pleasure to notice it. It is edited and published in Washington, D. C., by Dr. Walter C. Murphy, formerly of North Carolina, its object being, the author says in his salutatory, "to collect, compile, edit and aid in the dissemination of information on Hygiene, Health, Medicinal Mineral Waters, Sanitary Science and Medical Climatology."

The first number is taken up mainly with a description of "The Land of the Sky," that world-famed plateau which has Asheville for its center. This is very proper, not only because the editor thus honors his own State, but because this locality is fast becoming the most important, from a health point, as it is already the most grandly picturesque section of the whole country. Many illustrations in

half-tone remind the reader of the countless scenes of magnificent grandeur and gentle loveliness that make this section so attractive.

We extend our congratulations to the Editor on the beautiful make-up of his magazine, and wish him every success in his laudable purpose of inciting the people of the South to greater effort in sanitary reform, and of correcting the false impressions that the South is unsalubrious.

Funny Bone. A Book of Mirth for Doctors, Druggists, Medical Students and Others. Funny Bone Publishing Co., St. Louis.

There are many things in the doctor's life to furnish a theme for the humorist, and the author of this volume seems to have missed none of them. It contains one hundred pages of fun, and will serve to take the doctor out of the serious things which so occupy him most of the time. The book is bound in paper and sold at 50 cents.

Abstracts.

RESUSCITATION OF THE ASPHYXIATED NEW-BORN.—Dr. A. B. Cooke (*Amer. Med. Surg. Bull.*) suggests dilatation of the sphincter ani by means of the finger anointed with vaseline. He claims that the effect is magical, if not startling. By this means the respiration is established efficiently, quickly, without exposing the child or injuring it, and the physician's attention is not taken away from the mother at the very time she should have it.

HYDROGEN PEROXIDE IN THE ABDOMINAL CAVITY.—Dr. H. C. Coe (*N. Y. Polyclinic*) expresses a favorable opinion on the use of peroxide of hydrogen in the abdominal cavity. He has used the fifteen-volume solution in cœliotomies for pelvic suppuration during the past year with good results. It is assumed, of course, that the peritoneal cavity has been thoroughly isolated, as is now done by all who operate in the Trendlenburg position, before any attempt is made to remove diseased adnexa. When collections

of pus are inadvertently broken into or pus tubes are ruptured, their contents are sponged out quickly, then the peroxide is at once applied to the septic focus and is removed as soon as it begins to foam vigorously. This is repeated as long as there is any reaction, when the parts are wiped dry, and it will be found that a healthy granulating surface remains, infection from which need no longer be feared. The same treatment of the stump after the removal of a pyosalpinx (whether the cautery has been used or not) prevents any danger from this source. The author either pours the peroxide directly into the cavity or applies it on sponges.

DIPHTHERITIC CONJUNCTIVITIS TREATED BY KLEIN'S ANTITOXIN.—Mr. W. H. Jessop (*Brit. Med. Jour.*) reports two cases in which the complete and rapid disappearance of the diphtheritic membrane upon the conjunctiva could only be attributed to the antitoxin. The first case was that

of a boy, 19 months old, who had membrane upon the upper and lower palpebral conjunctiva of the left eye, and a patch of membrane on the left side of the uvula. There was enlargement of one lymphatic gland over the parotid, and there was albumen in the urine. Three injections of Klein's antitoxin were given, $1\frac{1}{2}$ drachms in all; the membrane disappeared in five days, and was not followed by conjunctivitis or other conjunctival change. There was no local treatment except distilled water. The second case was that of a male child, 8 months old. There was membrane on the palpebral conjunctiva of both eyes; the parotid lymphatic glands were enlarged; there was a muco-purulent discharge from the nose. Two injections of Klein's antitoxin, 1 drachm in all, were given, but there was no local treatment. The membrane disappeared in four days. The membrane in both cases contained quantities of Loeffler's bacillus.

PEPTOMANGAN IN THE TREATMENT OF ANÆMIA IN PULMONARY TUBERCULOSIS.—In an article contributed to the *N. Y. Med. Jour.* Dr. Karl von Ruck has given his results in the use of this preparation in overcoming the anæmic condition of consumptive patients. While our direct treatment of the disease with specific germicidal remedies, inaugurated by professor Koch four years ago, is now still further advanced toward success through the purification of the remedy by Professor Klebs, and by the experience obtained since its introduction, we must, nevertheless, not lose sight of the resisting power of the patient and of its increase; as far as that may be possible, it must be accomplished, if we expect to deal

most successfully with the disease. In the application of the specific culture products in pulmonary tuberculosis his observations have amply confirmed this view, and the best results are being obtained in cases where the general strength of the patient is still good, and especially when the blood approaches a normal standard in corpuscles and hæmoglobin.

Most tubercular patients show a considerable loss in these respects, even in the early stages, and these losses are often observed to progress despite a good appetite, and in patients who for the time gained in weight. That the anæmia in such cases is of toxic origin is proved by the fact that the losses become balanced under specific treatment, and his records show many instances in which the administration of tuberculin, and more particularly larger doses of antiphthisin (Klebs), showed that a slow regeneration of the blood followed their use, while the febrile movement accompanying the resorption of toxines disappeared.

In seeking to aid the regeneration of the blood he naturally looked to the ferruginous remedies in addition to proper dietetic and hygienic management, but the indifferent results caused him to adopt rectal injection of defibrinated blood. This accomplished the object most satisfactorily, but was very objectionable to the patient. Some twelve months ago he began the administration, reluctantly, of peptomangan to a few patients who positively refused the rectal injections, and has tabulated the results in twelve cases after six weeks use. An analysis of the table shows that in the six weeks previous to the use of the peptomangan there were ten patients in whom

the loss or gain in their blood condition could be compared; 7 of these patients gained in all 1,408,000, or an average of 200,000 each, whereas these same patients gained under peptomangan 3,609,000 corpuscles, or an average of 510,000 for each.

As to hæmoglobin, a similar increase is perceptible. In six weeks preceding, of the 7 patients, 6 also gained in hæmoglobin in all 56 per cent., or an average of 9 per cent.; but under peptomangan these same 6 patients gained in all 81 per cent., and on an average 13½ per cent.

Further, whereas of the 10 patients only 7 gained in corpuscles and 6 in hæmoglobin in the six weeks preceding, under the peptomangan 9 gained in corpuscles and hæmoglobin, and no loss occurred except in 1, and she lost only a third as much as in the six weeks before.

Another series of cases was more accurately observed within the last six months, and the results were practically the same as in the table. In all classes the improvement of the blood condition was highly satisfactory—in quite a number phenomenal.

DOUBLE CASTRATION FOR HYPERTROPHY OF THE PROSTATE GLAND.—Dr. J. M. T. Finney (*J. H. Hosp. Bull.*) reports two cases in which double castration was performed for the relief of hypertrophy of the prostate gland. The first patient entered the hospital in August, 1894, complaining of inability to urinate and constant dribbling of urine, dating back two years. He had to resort to the constant use of the catheter. At that time examination of

the prostate showed it to be very much enlarged. The urine contained a trace of albumen, very few casts, slight amount of pus; was acid, and specific gravity 1.014. Upon catheterization 420 c.c. of urine were drawn off. The capacity of the bladder was about 1000 c.c. The bladder was much dilated and atonic. Examination for stone negative. The patient was put upon the regulation treatment, washing out the bladder, regular catheterization and the usual internal medication. Still he was unable to void his urine, so the operation of castration was proposed. He very willingly agreed to it, and it was performed September 22, 1894. On the sixth day following he urinated unassisted, and since that day, with one or two setbacks, he has done well. He has had occasional attacks of pain in the right side along the ureter and over the kidney, after which there appeared a little pus in the urine, but nothing more definite. The last note in his history, five weeks after operation, is as follows: "The lateral lobes of the prostate are just palpable to the right and left of the silver catheter previously introduced. They are soft, not tender, and show marked atrophy. There is now not more than 50 c.c. of residual urine; total amount 1200–1500 c.c. He urinates about seven times in the twenty-four hours. In other respects he is in very good condition."

He operated upon a second patient in private practice. His trouble was of five years' duration, with inability to urinate for two years past. The prostate was much enlarged; the urine contained pus and albumen in small amount. From frequent and rough using of the catheter, a false

passage had been made, the later ca-
theterization became very difficult and
painful. For this reason the operation

of castration was advised. He has
urinated without difficulty since the
fifth day.

Correspondence.

CONTINENTAL DOCTORS.

*To the Editor of the North Carolina
Medical Journal:*

SIR:—In an official list of the prisoners
of war captured at Charleston, S. C., in
May, 1780, when that city was surren-
dered by General Benjamin Lincoln to
Sir Henry Clinton, I find the follow-
ing, which may be of interest to the
profession:

“Roll of the Continental Officers of
the North Carolina Line, Prisoners of
War in South Carolina, as they stand
for exchange, regulated by a Board of
Officers and sent to Sir Henry Clinton
and General Greene:

“William McClure, Regimental Sur-

geon, 2d Battalion, taken 12 May, 1780,
exchanged 14 June, 1781.

“Jonathan Loomis, Regimental Sur-
geon, 3d Battalion, taken 12 May, 1780,
exchanged 14 June, 1781.

“James W. Greene, Regimental Sur-
geon, 1st Battalion, taken 12 May, 1780,
exchanged 14 June, 1781.

“Joseph Blythe, Regimental Sur-
geon, taken 12 May, 1780.”

In an article in the NORTH CARO-
LINA MEDICAL JOURNAL for August,
1894, it is shown that these Surgeons
were still on duty with their respective
battalions as late as August, 1782,
except Dr. Blythe, who was then
serving with the 4th Battalion.

GRAHAM DAVES.

Newbern, N. C. Feb. 27, 1895.

Obituary.

ROBERT LEE PAYNE, M.D.

Most of our citizens have doubtless
learned that Dr. Robert Lee Payne,
Senior, died in Lexington, on the 25th
of February at the hand of Baxter
Shemwell, a young man connected
with a drug store in the same town.

Dr. Payne had but a little while
entered his sixty-first year, having been
born in Lexington on the 29th of De-
cember, 1834. He was descended from
English ancestry, his father being Dr.

C. L. Payne, formerly of Danville,
Va., but latterly of Lexington, and
his grand-father R. J. Payne. He was
educated at Caldwell Institute, Hills-
boro, going thence to Davidson Col-
lege and the University of North Caro-
lina. Choosing medicine as his pro-
fession, he prosecuted its study at
Jefferson College, Philadelphia, grad-
uating in 1857. He settled in Lexing-
ton and associated himself with his
father for the practise of his profes-
sion, remaining there until his death.

He was a member of the Medical Society of the State of North Carolina, having been admitted to membership in 1859, and during his thirty-five years membership was a loyal and an interested member, and held many positions of honor. He was President in 1878. Vice-President in 1870, Annual Orator in 1871, and in 1872 was elected a member of the Board of Medical Examiners of North Carolina.

Dr. Payne was a man of recognized ability and contributed numerous papers to various medical journals and to the Transactions of the State Medi-

cal Society. He was highly esteemed and of considerable influence in the section in which he lived so long, and held, at various times, public office in his county and town.

It is rare, indeed, that the profession of this State have to mourn the death of a member by wilful violence, and the deed brings greater horror when it falls upon one so prominent and so highly respected. The sympathy of the entire profession will go out to the afflicted family, and multitudes will mourn the loss of a true friend and faithful physician.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From February 7, to February 20, 1895:

Birmingham, Capt. Henry P., Assistant Surgeon, is relieved from duty at Fort Grant, Arizona Territory, and ordered to Fort Trumbull, Conn., for duty, relieving Captain Freeman V. Walker, Assistant Surgeon. Captain Walker, on being thus relieved will proceed to Fort Grant, Arizona, and report for duty at that post.

Fisher; the extension of leave of absence granted 1st Lieut. Henry C. Fisher, Assistant Surgeon, is further extended one month.

Byrne, Col. Chas. C., Assistant Surgeon General, is relieved from duty as Medical Director, Headquarters Department of Dakota, and announced as Medical Director, Headquarters, Department of the East.

Tilton, Lieut. Col. Henry R., Deputy Surgeon General, is announced as Medical Director, Headquarters Department of Dakota.

Godfrey, 1st Lieut. Guy C. M., Assistant Surgeon, will proceed without delay from Fort D. A. Russell, Wyo-

ming, to Fort Omaha, Nebraska, and report for temporary duty.

THE NAVY.

Two weeks ending February 23, 1895:

Biddle, Clement, P. A. Surgeon, ordered to Naval Hospital, Chelsea, Mass.

Atlee, L. W., P. A. Surgeon, ordered to Naval Hospital, New York.

Hester, F. A., P. A. Surgeon, ordered before Retiring Board.

MARINE HOSPITAL SERVICE.

For the fifteen days ending February 15, 1895:

Purviance, George, Surgeon, detailed as Chairman Board for examination of Assistant Surgeons for promotion, to convene in Washington, D. C., March 11, 1895, February 8, 1895.

Hamilton, J. B., Surgeon, granted leave of absence six days, February 7, 1895.

Austin, H. W., detailed as member of Board for examination of Assistant Surgeons for promotion, February 8, 1895.

Irwin Fairfax, Surgeon, detailed as Recorder of Board for examination of Assistant Surgeons for promotion, February 8, 1895.

Stimpson, W. G. P., Surgeon, to assume temporary command of Service

at Port Townsend, Washington, during absence of P. A. Surgeon J. O. Cobb, February 13, 1895.

Eager, J. M., Assistant Surgeon, ordered to examination for promotion, February 9, 1895.

Blue, Rupert, Assistant Surgeon, granted leave of absence for six days, February 13, 1895.

Norman, Seaton, Assistant Surgeon, ordered to examination for promotion, February 9, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

We are in receipt of a copy of a convenient day-book for March, 1895, from the Medical Novelty Co. (Inc.), 21 West 23d Street, New York.

A new medical school, to be known as the "Practitioner's School of Medicine," has been organized in St. Louis. A school for practitioners reminds the *Columbus Medical Journal* of the doctor who spoke of sterilizing his antiseptics.

The *Medical Record* says the supply of guinea pigs is running short. They are needed to test the antitoxin strength of the diphtheria serum. Seventy-five cents are paid for a healthy pig two months old. A pair for breeding purposes cost \$1.50, and they breed four times a year, with four in a litter, but one dies shortly after birth.

We are in receipt of Warner's Therapeutic Reference Book, which will be sent to any reader of the JOURNAL sending fifteen cents to defray mailing expenses and who will mention this JOURNAL. The book is of convenient size for the coat-pocket, and is bound in flexible leather. It contains much information that the busy physician will find useful, such as aids in memo-

rizing doses, table showing the digestibility of different foods, a medical formulary containing upwards of 300 selected prescriptions, arranged alphabetically with reference to the conditions in which they are indicated. These are only a few of the valuable points of which this little book is full.

The Medical Practice Act in Tennessee has been declared unconstitutional. The *Southern Practitioner* says it has no tears to shed over this decision, and thinks the best thing to be done is for the Legislature to repeal the whole thing and get it out of the way. Evidently the bill was badly drawn, and the better thing would be to make a better one. A State without a good medical practice law in these days will be a dumping ground for quacks and incompetents.

Messrs. Frederick Stearns & Co. have established a Six Hundred Dollar Fellowship in the University of Michigan, to be known as the "Stearns' Fellowship of Pharmaceutical Chemistry and Pharmacology."

The newspaper reports on the facts connected with the distressing affair at

Lexington, resulting in the death of Dr. R. L. Payne, are so contradictory that we refrain from publishing any account at all until the facts are established at the trial to be held this week.

ANTITOXIN IN AUSTRIA.—J. Edward Nettles, United States Consul at Trieste, Austria, in a report, published in the *Abstract of Sanitary Reports*, gives comparative statistics of the mortality attending diphtheria in Trieste before and after the introduction of the Behring-Roux antitoxin serum treatment. This was commenced August 15, 1894, and has been continued ever since with the exception of two weeks ending December 8, when the serum was exhausted. They are as follows:

"The percentage of deaths during the year 1893, as shown by the sanitary reports, was 46.95, and from January 1, 1894, to August 15, 1894, when the antitoxin serum treatment began, 42.70 per cent. From August 15 to date, exclusive of the two weeks ending December 1 and 8, when the serum supply was exhausted, under the use of the antitoxin serum, the percentage of mortality has been reduced to 16.50 per cent. The percentage of deaths has been lowered as experience in the use of the antitoxin was acquired; thus, since January 1, 1895, the deaths have been only 10 per cent. It is worthy of note that during the two weeks ending December 1 and 8, when the antitoxin serum was not used, the deaths amounted to 44.30 per cent., there being a sudden and sharp decrease of deaths when its use was resumed."

Surely, unless the honesty and ability of prominent and heretofore trust-

worthy observers count for nothing, the introduction of the serum treatment of diphtheria will mark on epoch in the history of medicine as important as that which has immortalized Jenner. It is interesting to note that the two discoveries are separated by just a century, and that half way between the two came the discovery of anæsthesia. Vaccination, Ether, Antitoxin.

The following is the health report of Wilmington for February, 1895:

	Whites.	Col.	Total.
Population.....	9,000	13,000	22,000
Deaths.....	8	23	31
Annual death rate per .	10.7	21.2	16.9

Causes of Death.—Whites; scarlet fever 1, consumption 2, brain diseases 1, heart disease 3, all other 1—total 8. Colored; pneumonia 1, consumption 7, heart disease 5, all other diseases 10—total 23.

The *Medical Missionary Record* has made a change in its title, and will hereafter be known as *The Double Cross and Medical Missionary Record*.

The official report for 1894 shows that on the various railroads of the United States there were, during the year, 37 passengers killed, as against 79 the year before, and 703 injured. Of the employes there were 399 killed and 6,519 injured, as against 650 killed and 8,848 injured in 1893.

BRONZE STATUE OF DR. GROSS.—Washington, D. C., Feb. 25.—The House to-day adopted the Senate joint resolution granting permission to the American Surgical Association and the Alumni Association of Jefferson Medical College to erect a statue in Washington of the late Samuel D. Gross, M.D., D.C.L., LL.D.

Dr. George Ross, of Richmond, Va., was recently presented (by a lady, of course) with a pair of gold-linked sleeve-buttons, on which are stamped "crossed Confederate flags." In acknowledging the token the Doctor made the following reply:

A PAIR OF SLEEVE-BUTTONS.

A pair of sleeve-buttons! they bear on their face

The flags of a country now dead;
A country that flashed on the world,
meteoric,
Brightening the skies, and then fled.

'Twas a sectional child, that land of the South,
As "Dixie Land" known among nations;

But while valor and home-love and sacrifice live,

Will a theme be for soldiers' narrations.

Do they speak, these buttons that fasten my sleeves?

Aye! silently speak they, and well;
For they bear on their face the Confederate flag

Which the Southrons bore and which fell.

To the men of all ages who gaze on its bars,

And count the bright stars on its shield,

They will tell of the heroes who fought and who fell,

And to starvation only would yield.

—Exchange.

Reading Notices.

We call the attention of our readers to the advertisement of the Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.

George W. Harder, M.D., Troy, New York, in his paper, "Diagnosis and Local Treatment of Chronic Ulcers of the Leg," appearing in the *Courier of Medicine*, regarding "Sennine," says:

"I cleansed the sore with simple soap and water, filled the excavations with 'Sennine,' a product of Boracic Acid and Phenol, covered with dry lint, having raised the limb to the horizontal position.

"This dressing should be applied every third day, and I remark here, there are very few of ulcers of this class which I have mentioned but which will be at least very materially benefited in a very short space of time by this method of treatment; in fact,

since I have adopted this apparently small procedure and made the patient persist in this, I have been very eminently successful."

At this season of the year, when radical and sudden thermal changes are the rule, it becomes of vital interest to the busy practitioner to have in compact, ready form, such approved medicaments as meet the analgesic and antithermic requirements of the bulk of his patients. As pertinent we call attention to the following combination tablets: "Antikamnia and Codeine," each containing 4¾ grs. antikamnia and ¼ gr. codeine. "Antikamnia and Quinine," each containing 2½ grs. antikamnia and 2½ grs. quinine. "Antikamnia and Salol," each containing 2½ grs. antikamnia and 2½ grs. salol, and "Antikamnia, Quinine and Salol," each containing 2 grs. antikamnia, 2 grs. quinine and 1 gr. salol. These, together with the well-known "Antikamnia Tablets," of varied sizes, and "Antikamnia Powdered," constitute indispensable factors in the armamentarium of the physician, and are more than ordinarily indicated in present climatic conditions.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, MARCH 20, 1895.

No. 6.

Original Communications.

WHAT IS TUBERCULIN ?

BY KARL VON RUCK, B.S., M.D., Director of the Winyah Sanitarium for Diseases of the Lungs and Throat, Asheville, N. C.

The above is the title of an open letter by Professor Charles Denison, of Denver, Colorado, published in the *Colorado Climatologist*, November 15, 1894.

In a personal letter received from Dr. Denison on the 13th instant, he requests me to reply to the letter, and I am the more glad to comply with this request, inasmuch as I am able to join with my own the views of Professor Edwin Klebs, who is at present my guest.

In his open letter Dr. Denison objects to the statement from another source, that tuberculin is identical with poisonous products resulting from tubercular processes within the living organism, and also to the consideration of tuberculin as a toxine or a toxalbumen, and he bases his objec-

tions upon the favorable clinical results which he and others have obtained from its therapeutical application. These results, he maintains, justify the belief that the remedy is an anti-toxine and capable of producing a certain degree of immunity when properly applied in suitably selected cases.

Dr. Denison wants answers to two questions—first, Is tuberculin a toxine or antitoxine? Second, How is it made? And he wants answers either from Professor Koch himself, or from some one who is thoroughly acquainted with this subject.

Before considering these questions I desire to refer to the subject of bacteria-therapeutics in general.

The foundation principle of bacteria-therapeutics is the self-limitation of

the diseases produced by pathogenic germs, and the shorter or longer immunity to reinfection after recovery.

This principle finds partial elucidation in the fact that in artificial cultures of such bacteria a similar limitation is observed, and that the cultures after a time cease to grow and finally die out long before the nutrient substances contained therein are exhausted.

The additional observation, that such culture fluids, when the germs are filtered off, act germicidal to the particular species, whereas other specific forms grow and multiply freely upon the exhausted culture fluids justifies the belief that this germicidal property belongs to the vegetation, or rather secretion products of the particular kind, and that the same as in man these excrementitious substances are poisonous to their producers.

The immunity from recurrence of the same disease is more difficult to explain, but it is assumed that either through the products formed by the bacteria, or from their disintegration within the organism, the tissues of the previously infected organism become so modified that for a time this growth and multiplication is no longer possible, or that the organism tolerates the poisons which the bacteria produce, and thus the germs, although present, do not occasion the symptoms of the specific disease. Much may be urged for and against either of these theories, yet the fact remains that a greater or less degree of immunity, as a rule, results, and may be artificially produced.

There can be no doubt that the substances which destroy the disease germs, or which confer immunity directly or indirectly, are contained

either in the bacteria or in their secretion products, and, so far as we approach a perfect condition of virulency and favorable growth of the germs outside of the living organism, we may hope to obtain these substances from their artificial cultures.

It is well-known that guinea pigs are highly susceptible to tuberculosis, when inoculated with virulent cultures, and with sufficient numbers of the germs the disease follows a rapid, definite and fatal course. In Koch's experiments made upon animals inoculated from the same culture, and with like quantities, the disease was allowed to develop to its unmistakable recognition, then certain animals were treated with tuberculin, while others for control were kept under the same conditions without treatment. In these control animals the disease pursued its usual fatal course, whereas the treated animals again improved, outlived the control animals by considerable periods; some finally succumbed to the disease in the end, others were killed for examination, after various periods of treatment, and in the latter the evidence of previously present but healed tubercular lesions were unmistakably demonstrated, although more recent processes pointed also to the fact that the old lesions were not all entirely recovered from. Professor Klebs took up this experimental work in guinea pigs, immediately after the announcement of tuberculin and carried it much further; and he also has shown that in guinea pigs treated with tuberculin previous to tubercular infection, the disease followed a much slower course, and that the tubercular lesions produced by inoculation had undergone retrogressive changes, and

in some cases entire cure. So far as guinea pigs are concerned, Professor Koch, and more particularly Professor Klebs, proved, beyond controversy, that tuberculin has a curative influence, and the latter also proved that it confers a certain degree of immunity, varying according to the time for which the treatment was carried out and the amount of tuberculin used.

The unexpected toxic effect of larger doses of tuberculin in the human surface at once limited its use for the treatment of human tuberculosis, and while guinea pigs bore doses of several hundred milligrams and improved under them, disaster followed from greatly smaller doses in man, and the persistence in the use of large and evidently poisonous doses for therapeutical purposes, brought the remedy into discredit, as it was not supposed that doses much smaller than necessary for the curative effect in guinea pigs could be of value in the treatment of the human subject.

There were, however, conservative men among the profession who, appreciating the unmistakably favorable influence of the remedy upon the animal, and recognizing that, despite the disasters in many instances, it acted curatively in man also, looked for a safe method of application by reducing the doses to such, which showed no toxic effect whatever, and who, under careful selection of cases, hoped to still take advantage of the curative properties. Their results justified their faith. For myself, I can say that I have so applied the remedy for three years and a half, and that I have every reason to be satisfied with the results I have obtained, while, with the exception of my first few weeks of experi-

ence, I have never observed a single instance in over 20,000 injections since made, where the remedy acted detrimentally, or produced undesirable symptoms or discomfort in my patients.

Tuberculin was not all one could desire, but it was a help, indeed an important one, and never having had faith in panaceas, nor ever expecting that we will get them, I was glad of the addition to my resources, hoping that something better might come in the future.

In the meanwhile, Professor Klebs and others undertook further experiments with the view of improving tuberculin by eliminating its toxic properties, the former devoting his entire time and energy to the subject.

Those interested will find a full account of the course of his investigations in his work on Tuberculosis, my space will only permit me to mention that he found tuberculin to contain alkaloids, soluble in alcohol, toxines or toxalbumens, precipitated by sodic iodide of bismuth, while another albuminous substance, a soz-albumen, was found in the alcohol precipitate. All these substances were separated and tried upon guinea pigs and other animals, and it was found that to the alkaloids were due the depressing and injurious effects upon the heart; to the toxalbumens the fever, malaise and inflammatory effects, while the soz-albumen was free from these properties. With the latter substance, now called antiphthisin, Professor Klebs has cured guinea pigs entirely, and kept others alive for long periods, while the control animals perished under the usual course and manifestations of tuberculosis and in the usual short periods of time.

In the human subject its application in doses up to several thousand times greater than permissible of tuberculin, has produced no depressing effect upon the heart, no fever or inflammatory symptoms, and no other undesirable effects, while it showed the same favorable, curative influence as upon guinea pigs, and proportionally larger doses to a much greater degree than obtained from the use of tuberculin.

It still remains to be shown what the effects are of the substances contained in the bodies of the bacilli of tuberculosis, and highly interesting and probably important results may be looked for from this line of experimentation, which Professor Klebs began in the past year and is now pursuing further in the laboratory of this Institution.

When these experiments will have been concluded, we shall have each substance contained in tuberculin in an isolated form, and so far as they are available for therapeutic purposes, we will be able to use them separately or in various combinations according to the nature and particular indication of a given case.

Antiphrasin is unquestionably the germicidal part of the tuberculin; it is obtained from the culture fluid from which the germs are previously filtered out; it is therefore a secretion and excretion product of the germ.

To answer Dr. Denison's question more directly, I would reply that tuberculin appears to be a complex substance containing toxins, toxalbumens and germicides (soz-albumen), as well as alkaloids (ptomaines).

As to its manufacture, it is very simple and as follows: The ripe culture, i. e., one which has reached its

limitation of growth, both bacteria and culture fluid, are brought upon the water bath and reduced to one-tenth the original amount and then filtered.

In this connection a prevalent error should be corrected. At the time of its introduction it was erroneously believed that what was then called Koch's lymph and subsequently tuberculin, was prepared under the control and auspices of the German government, and was given to the world without profit, the amount paid, however, going into the hands of the government and not into those of Professor Koch and his associates. Professor Klebs informs me now that this has never been the case. The laboratory in the Lüneburger Strasse in Berlin, where the remedy was prepared from the beginning under the direction of Dr. Libbertz, was an entirely private enterprise of Professor Koch, in which Professor Pfuhl and Dr. Libbertz and possibly some others had an interest, and to these gentlemen resulted the profits. Later, the laboratory was transferred to the Farbuerte of Meister Lucius, and Bruning, in Hoechst, A. M., where Dr. Libbertz has charge yet, and where the remedy is made for the benefit of those interested. It is remarkable that the price for tuberculin of five marks a cubic centimetre in Germany and two dollars a cubic centimetre in this country is still maintained, whereas Professor Klebs has reduced the price of the much more expensive purified preparation to one-quarter of this amount, and contemplates still further reductions as the facilities for its production are being increased and improved.

If we now consider the clinical aspect

of tuberculin and its purified derivative (antiphrisins—Klebs), we can very readily see that the great obstacle to the free use of the former for therapeutic purposes is the presence of the toxalbumens and of the alkaloids, these substances being highly poisonous in minute doses and producing the often-described fever, malaise, nausea, diarrhœa, general aching, depression and disturbances of the heart and circulation. To introduce considerable and distinctly effective quantities of the associated soz-albumen or germicidal substance, we would have to give doses otherwise seriously detrimental, if not fatal, to the human subject.

Animals seem to have a greater toleration for toxalbumens and alkaloids, and hence their greater toleration for tuberculin to a degree that quick and curative effects followed its use in their treatment. In the human subject by very gradually increasing doses a certain toleration can be established.

Under such gradual increase, undoubtedly, good results followed, especially in cases in which the disease was not very active nor following a rapid course; therefore in the early stage and in non-febrile advanced-stage cases we had the best results. These cases allowed of sufficient time to obtain a gradually increasing tolerance, but they also suffered acute exacerbations when the remedy was injudiciously pushed to larger doses. At best the treatment had to be continued for a long time, and required such circumspection and watchfulness that I was never willing to administer tuberculin except to patients living in my own house and under my constant observation. I am still gratified with my results and observe with much satisfac-

tion that they have been quite uniformly maintained after the patients were discharged and returned to their previous places of residence and mode of life. The remarkable absence of relapses would speak for a certain degree of immunity produced by the remedy.

In 1891 and 1892, when Professor Klebs first introduced a purified product of tuberculin under the name of tuberculocidin, I treated a series of cases with this substance and reported my results in the *New York Medical Journal* for 1892. I was then well convinced of the germicidal properties of tuberculocidin, but the price of three dollars a cubic centimetre was practically prohibitive under the large doses required. The trial came to an abrupt termination by the destruction of my Institution by fire in August, 1892.

In the early part of this year tuberculocidin was again made use of in two cases, who proved entirely intolerant to even the minutest doses of tuberculin, and who failed to show any improvement after three to seven months residence in my Institution. All other means having been exhausted, I resorted to tuberculocidin, and with very satisfactory results. Improvement became evident after only a few weeks use of the remedy, and both patients progressed so satisfactorily that other patients observing the remarkable results, insisted upon being treated with it also. Both of these first patients made an entirely satisfactory recovery and have remained well. In addition to these two cases, between fifty and sixty other patients have been treated, and since July antiphrisins has been used instead of tuberculocidin. The results obtained

have been highly satisfactory, and will be reported in the future. At this time most of these cases are still under treatment, and with the exception of two very far advanced, hopeless cases, who received the remedy at their own urgent request, we have witnessed improvement in various directions, clearly attributable to the antiphrasin in every case.

Three early-stage cases have been discharged apparently cured; at the time of discharge all consolidation distinguishable by percussion had disappeared. The respiratory sounds were clearly vesicular, and the patients declared that they felt as well as ever.

Quite a number of more advanced-stage cases have also been allowed to return home with instructions to return for further treatment if symptoms should again return, the disease appearing entirely arrested and the general health restored.

The observations of a favorable character which appear to me partly or altogether due to antiphrasin, are as follows:

1. In all cases the fever became less as the doses were increased. In the earlier stages the fever subsided entirely and did not return. In the advanced stages, where septic and other complications were present, while the temperature diminished, it did not disappear entirely until the complications were also controlled.

2. In early-stage cases the cough and expectoration were favorably influenced at an early period of the treatment, and disappeared entirely as the treatment was continued.

This is also true of night-sweats.

3. The appetite and nutrition im-

proved in proportion to the reduction of fever.

4. Degeneration (granular, club forms and fragmentation) of the tubercle bacilli was constantly observed in all cases treated. The tubercle bacilli diminished steadily in number in the total quantity examined (one cubic millimetre homogenous sputum) and finally disappeared entirely. In more advanced cases, where large cavities were present, while the degeneration and diminution in number was also observed, their entire disappearance from the globular sputum (from cavity) has thus far only occurred in a few cases treated a longer time, but in non-globular sputum the degeneration and disappearance of the bacilli occurred the same as in early-stage cases.*

In a considerable number of patients previous and repeated sputum examinations were available for comparison.

5. Remarkable changes have been observed upon physical examination consisting in unmistakable clearing up of percussion dullness and return of a vesicular quality of respiration in the cleared-up area. (I can truthfully say that I have never seen such remarkable changes in so short a time; in several instances the dullness gave place to a deep, low note, with evidences of emphysema. I have not failed in a single instance to observe such local

*The longer continuance of tubercle bacilli in sputum from cavities Professor Klebs explains by the fact that the remedy cannot reach them as readily there. In the cavity the tubercle bacillus grows more rapidly upon the solid, cheesy, degenerated walls and upon the dead tissues lining them, which are cut off from the circulation; only after such cavities have become clean and the walls have become vascular, will the tubercle bacilli be accessible to germicidal influence through the blood.

improvement, over more or less extensive areas, and explain this by the absorption of tubercular tissue and of inflammatory exudates from the acini and alveoli of the lung, which is further confirmed by the fact that the vital lung capacity was increased in reasonable proportion, while the patients, before the physical examination was made, stated that their breathing was freer, and that their shortness of breath upon exercise had certainly improved.)

6. There is an almost uniform statements by patients of the benefit they themselves become aware of, especially as to easier and freer breathing, increased sense of strength and well-being, better appetite, less fever, less cough and expectoration, and better sleep.

7. The improvement observed by me in temperature, pulse, respiration and by physical examination and the subjective sense of improvement by the patients themselves was obtained in comparatively short periods of time, usually beginning within the first three or four weeks, and such improvements are the more rapidly observed when large doses are administered.

8. When antiphthisin was locally applied to tubercular ulcerations the latter became clean and showed a tendency to heal, and in cases treated for from several weeks to several months, such ulcerations have healed and remain so to this time.

So far, then, my own experience confirms what Professor Klebs has claimed for antiphthisin as being specific and germicidal against the bacillus tuberculosis, under the degeneration and disappearance of which the tubercular process undergoes retrogressive changes by the conversion of tubercu-

lar tissue into such from which it has proliferated.

Such action, however, also indicates the limitation of the remedy, being a specific germicide, we cannot expect it to control the conditions resulting from associated pathogenic germs of, for instance, the streptococcus, pyocyanus, diplococcus, etc., nor can we expect to remove with it the symptoms and degenerative processes indirectly due to them or to the tubercle bacillus. Antiphthisin must therefore not be expected to control septic processes, fatty or amyloid degeneration, nor reach the tubercle bacillus in dead tissues or in localities not, or but slightly, accessible to the circulation or to local applications.

These limitations should be clearly borne in mind in its application and in the expectation from its action.

In my endeavors for furthering the successful treatment of tuberculosis and in my clinical use of tuberculin and of antiphthisin, I have ever been governed by the desire to find the truth; my convictions have justified me in inviting Professor Klebs to come to this country to aid me with his experience and advice. Since his arrival I have been able to induce him to associate himself with me in my work, with which he was pleased to express his greatest satisfaction. Tuberculin and antiphthisin will hereafter be produced here in our bacterio-therapeutic laboratory, which is now nearly ready for operation. Of this laboratory Professor Klebs will have exclusive charge, while he will also act as consulting physician to the Sanitarium.

The first experimental labor upon animals in the new laboratory will be in the direction of producing immu-

nity to tubercular infection, and to determine in what part of the culture of the bacillus the immunity-producing substance is contained. Investigations will also be made as to the associated pathogenic germs in pulmonary tuberculosis, and especially in advanced cases with cavity. After their relation to the course and symptoms of the disease is determined, efforts will be made to find in their culture products the proper germicide for their successful removal.

The results of these labors will be made known to the profession by frequent communications by Professor Klebs. For the present antiphthisin will not be given to the ordinary channels of trade. On the contrary, appreciating that for the successful treatment of tuberculosis something more than the ability to give a hypodermic injection is required, a course will be soon offered in this Institution in which full and practical instruction will be given to members of the profession. The course will include Bacteriology, Pathology, Physical Diagnosis and the general management and care as well as the specific treatment of tuberculosis.

To physicians of known ability in this field of labor and to institutions where a scientific trial of the remedy is assured, antiphthisin will now be furnished direct from the laboratory, and until its clinical value is fully established and confirmed by competent observers it will not be given out in a general way; special application for particular cases will be considered, and, so far as from the limited amount available it is possible to do so, the remedy will be furnished for such cases.

As to the directions for the use of

antiphthisin, it may be said that the same should be employed as a specific germicidal product. It is only recommended for use in the earlier stages of tuberculosis, and must not be expected to relieve complications, especially those which are produced by other pathogenic germs, notably such as produce suppuration and septic fever. The remedy can only act upon *living tubercular tissue* and upon tubercle bacilli which are within reach of the circulation. The more vascular the part, the more rapid and distinct is its specific effect. It must, however, be remembered that when a large number of tubercle bacilli are destroyed and a considerable quantity of tubercular tissue is being absorbed, toxic products the same as are contained in the unpurified culture fluids may thus be liberated within the organism, which may give rise to aching, malaise, fever and congestion of tubercular areas.

It is therefore best, except in the most urgent cases, to begin with the remedy in comparatively small doses and to increase it gradually, thus avoiding effects which, although not at all dangerous, may give rise to alarm and anxiety both on the part of the physician using the remedy and of the patient.

Should such an effect, nevertheless, occur, the remedy may be intermitted for two or three days, until the effect has entirely subsided, to be then resumed with about half the previous dose administered, and the increase continued the same as before. Under the more cautious procedure the beginning dose for an adult is one-tenth of one c.c. of the ten times concentrated solution, and this dose is increased by one-tenth c.c. per day until

one c.c. is reached. The latter may be repeated for several days, and the increase thereafter may be more rapid, by half a c.c. at a time, repeating each such dose three or four times, or oftener, according to the effect produced. Antiphthisin is non-poisonous and produces no symptoms unless, as indicated, by too rapid destruction of bacilli and absorption of their products. At present the maximum dose that has been reached is ten c.c. per day, and when doses larger than one c.c. are reached it is recommended to divide the dose, giving one-half in the forenoon and the other half in the evening. If the remedy produces local irritation at the point of injection, or when larger doses are administered the rectal method may be adopted, which consists in introducing the remedy diluted with a small quantity of distilled water, with a sterilized rectal syringe, into the rectum. The greater vascularity of the latter part causes rapid absorption of the remedy, and observations thus far justify the belief that such administration is fully as effective as is the hypodermic method. Intravenous injections are more effec-

tive still, and much smaller doses are required.

After fifty to one hundred c.c. of the remedy have been used, the question should be determined whether an intermission of some weeks or months should not be allowed, or the treatment stopped entirely. The entire and repeated absence of the tubercle bacillus in the expectoration, together with a corresponding amount of improvement, general and local, and the absence of all fever would justify such a course.

The fever due to the tubercular processes will be found to gradually disappear when large doses of the remedy (from two to five c.c.) are reached.

The present cost of antiphthisin is fifty cents per c.c. in vials of ten, fifty and one hundred c.c., the amount for which, to save labor, must accompany the order. It is not intended to make the laboratory a source of personal gain, on the contrary, its object is to produce the remedies at so low a cost that the same will eventually be within the reach of the poor, which will be possible when the demand for it justifies its preparation upon a large scale.

Society Reports.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

February 26, 1895.

Dr. Hugh McGuire read a paper
on

LYMPHADENOMA,

commonly known as Elephantiasis; the former better expressing its pathology.

The nature of the disease, its causes and symptoms were gone into and then the treatment was taken up.

If the disease is seen in its early stage and proper treatment started, it may be relieved, or, at least, held in

check; but, if the trouble has become established, under our present methods little could be accomplished without the aid of the knife. During the inflammatory attacks the patient should be put to bed, hot or cold applications and the usual remedies for inflammatory troubles used. If the fever is high, anti-thermal agents should be employed. Tonics, such as quinine, iron, cod-liver oil and the mineral acids can be profitably administered; but perhaps the most valuable medication is iodide of potash. If the patient be living in a tropical country, he should of course be advised to move. After the inflammatory attack has subsided, inunctions of iodine and mercurial ointment should be used to soften the skin and promote absorption. Much good has been done by firmly bandaging the part with a woollen, or, better still, a rubber bandage. Lately strong galvanic currents have been highly recommended. Ligation of the main artery of the limb and excision of a section of the sciatic nerve have been tried, and occasionally do good; but neither can be relied upon. In advanced cases of lymphadenoma of the genitals the affected parts should be amputated. Recent authorities also advise removal of large wedges of the affected tissue when the legs are involved. If the patient's condition does not allow removal of all the growth at one sitting, several operations may be done. In the operations the most rigid aseptic precautions are necessary, because of the intimate connection this growth has with the lymphatic system.

Before concluding, I would like to report an interesting case of lymphadenoma which has been under my

treatment for some weeks. It is as follows:

L. C., colored female, aged 20, has lymphadenoma of the lower limbs the right more than the left. The greatest measurement of the right calf is 33 inches, thigh 35 inches. Both legs are eczematous. Seven years ago the patient suffered from in-growing toe-nail of the right foot. An eruption started from this, the parts became hot and swollen, and she suffered from severe pain and fever for several days. On an average of once every one or two months she has had acute attacks of the disease, and after each the leg has increased in bulk, until now it has reached an enormous size. About three years ago the left leg became involved and has steadily grown worse. The attacks are more severe in summer, and any unusual amount of work or walking will bring on the trouble, but complete rest of the limb is equally injurious, as there then is an accumulation of lymph in the part, causing great tension. Any abrasion of the skin is followed by a discharge of lymph, which gives temporary relief. During attacks she has sharp shooting pains in the groin and calf, the limbs become stiff, glands swell and there is high fever. This condition lasts for a day or two, then gradually subsides, leaving the limbs larger and the general health impaired. The legs are now enormous and locomotion is difficult.

In treating her I have, at Dr. Hunter McGuire's suggestion, departed from the usual method. Three or four times weekly I apply over some of the main lymph channels of the leg a cup-shaped electrode, which contains one day a saturated solution of iodide of potash,

and the next tincture of iodine. A galvanic current of seven or eight milliamperes is used for cataphoresis. Whether this treatment will give any permanent relief I am as yet unable to say; but since it was begun the calf measurement has been reduced from 34 to 33 inches, and the patient has passed a longer period without an acute attack than she has known for years. Her general health has been improved by tonics, and she is advised to take a moderate amount of exercise.

The Doctor exhibited photographs of the case.

DISCUSSION.

Dr. Hugh M. Taylor: I am of the opinion that we do not know enough of the diseases of the lymphatic system. It has an important part in the economy closely related to that of the veins. The lymphatics are the great sewers; they cart away septic matter. To see how soon they act, watch a septic wound. But besides this, they convey antiseptic material, and this should teach us the value of using antiseptics which are absorbed from the surface by the lymph radicles and carried to the deeper parts. As I understand the question, it is due to blocking of the deeper lymphatics producing inflammatory troubles, overgrowth, etc., just as obstruction to the veins would cause œdema. Elephantiasis may start as a surface injury, spread through the lacunæ and radicles to the deeper vessels and main channels, and even affect the glands, but not necessarily the latter. The glands may be affected in disease without involvement of the vessels, acting as catch-pits for the septic material which has been conveyed to them by the

pipes, the lymph-vessels. There are two forms of elephantiasis: (1) Spurious, due to obstruction and inflammation of the radicles first and then the deeper channels. (2) True, due to a germ found in the tropics and semitropics. I cannot see what treatment should be adopted except to produce absorption of the obstruction.

Dr. Edward McCarthy thinks it would be difficult to get union in this disease when pieces are cut out, as was stated by Dr. McGuire.

REPORTS OF CASES.

Dr. V. W. Harrisou: I report this case because of the family history, which is novel, to say the least. The patient had post-partum hemorrhage before the placenta was delivered. She was under chloroform, so the hand was introduced into the womb and the portion of the placenta found adherent was peeled off with difficulty. She bled for twenty minutes, but made a recovery. Her two aunts died from post-partum hemorrhage. One was aged 22, the other 24 years. Her mother had four children and after the birth of each there was hemorrhage. Two sisters, 18 and 19 years old, respectively, died from post-partum hemorrhage.

Dr. Taylor: Male, aged 40; lawyer. Five years ago, while pleading a case, the patient, who was a robust man, was taken with a sudden pain in the head, rendering him unable to go on. He was taken home and to a great extent lost his memory. Accompanying this there were no other troubles, as paralysis etc. In this condition he remained for six weeks or two months, then he became better and was advised to give up practice and go farming.

He did this for two or three years and was doing well. About this time he had occasion to go to Baltimore. While on the street in that place he suddenly lost the use of his lower extremities, but consciousness was retained. Control over the bladder and rectum was gone. He was sent to a hospital and in three or four months his bladder, rectum and locomotion had improved to some extent. In this condition he has been ever since. He walks as though he had locomotor ataxia; he has the girdle sensation and exaggerated reflexes; control over the bladder and rectum is only partial; constipation is present and there is a sense of numbness in the lower extremities. Mentally he is whole and has returned to his vocation as lawyer. I am not clear as to the cause of the trouble. When first taken (while he was laboring under mental pressure), I am of the opinion that some small vessel of the brain ruptured, producing effusion of blood and consequent pressure. It was too sudden to be due to inflammation. In six weeks the clot was absorbed and there was restoration. The loss of locomotion and control over the bladder and rectum were due to rupture of a vessel of the meninges of the cord and not of one of the cord itself. I say it was hemorrhage because it was sudden. Then in six weeks or two months this clot was absorbed and the worst effects were partially, but not entirely, recovered from. I do not know if a better condition will result; if the disease does not progress, the prognosis is good. The only intelligent hypothesis I can give is the rupture of the blood-vessels due to an atheromatous condition. There is no history of spe-

cific trouble. For treatment, I am giving him 50 grains of iodide of potash a day.

Dr. John F. Woodward agrees that the trouble is hemorrhagic and in the lumbar region. It is a mixture of locomotor ataxia and myelitis the sensory and motor tracts of the cord being involved. I am sure, said the Doctor, that 150 grains of the iodide, instead of 50, would give better results, as the following shows: A man seen at the Eye, Ear and Throat Clinic had lost the use of all the muscles of the eyeball and of the upper lid, the right eye being the one affected. The trouble was specific. When 60 grains a day had been reached all motion except that of downward was restored. The dose was increased to 120 grains and the eye moved perfectly.

Dr. William S. Gordon: I do not agree with Dr. Woodward that the case is one of true locomotor ataxia. If it is, some explanation is to be made. Of course, there was some predisposition in the brain to the attack. If the lesion was in the ascending or descending lateral tracts, the spinal symptoms would have been continuous with those of the brain, but the two are separate. If the case were a well-marked one of locomotor ataxia, we would have lightning pains. Besides a lesion of the posterior columns, the cerebellar tracts would be affected. Pressure, if light, would cause irritability and exaggeration of functions; if great, then abolition. I do not doubt that the cause of the disease is effusion.

Dr. Woodward: Locomotor ataxia may begin months or years before its manifestation, agreeing with the symptoms detailed by Dr. Taylor. There is an indication in the optic nerve long

before, and also in the head, arms and legs. I did not say the case was one of true ataxia, but a mixture of it and myelitis. The fact of only a partial involvement of the sphinctres proves it. It is hard to say to what the lesion

is due. It is now contended that in locomotor ataxia the seat of injury is in Spitzka's or Gower's column. Dr. Taylor's case may develop into one of true locomotor ataxia.

MARK E. PEYSER, M.D., Sec'y.

Selected Papers.

THE "DISPERSIBLE" TUMORS OF THE FEMALE BREAST, WITH CASES.*

BY HERBERT SNOW, M.D., Surgeon of the Cancer Hospital, London, etc.

A very common question by hospital patients who apply with a "lump in the breast" is: "Whether this cannot be dispersed?" While it is needless to remark that such an aim is not possible in the case of a cancerous growth, or that should we vainly essay for the latter merely tentative treatment, we shall only succeed in frittering away what may yet remain of the six or eight weeks period, within which alone modern surgery can reasonably guarantee a radical cure, yet I should like now to point out that a margin of instances numerically considerable yet exists, wherein recourse to the operator's knife is hardly ever necessary, and in which "dispersal" can be effected with no great difficulty.

Foremost of the latter is the tumor described in my works, by way of distinguishing it from the connective-tissue mammary growths of later life,

*A paper read in the Section of Surgery at the Bristol meeting of the British Medical Association, 1894.

as the "fibroma of adolescence." This is found only in the evolutionary period of the mamma, i. e., from fourteen to twenty-five years of age. A young girl who wears a tight corset appears with the "lump" aforesaid, varying in degree from a scarcely perceptible thickening of the breast-tissue to a distinct, rounded, rather nodular tumor as large as a walnut. Often several of those are present, and both breasts are affected. The pain complained of varies greatly with the emotional tendencies of the girl; and also (in no small degree) with her frequent resort to tea-drinking. Commonly it exhibits an inverse ratio to the palpable magnitude of the tumor; it is always worst at the menstrual periods. Such growths are the necessary result of obstructed mammary development in early youth, and, so far as I am aware, occur only in a state of civilization. From the huge connective-tissue growths which appear during the decline and devolution of

the mammary gland, i. e., after the age of 34, the "fibroma of adolescence" differs in not becoming associated with cyst-formation, an invariable sequel to the adeno-fibroma or cystic-fibroma of middle age. The former generally yields to suitable management of hygienic and medicinal character; the latter is never cured, or even arrested, without a surgical operation.

The old rule *sublata causa, tollitur effectus*, while not absolute, yet has considerable significance in the case of an organ which, like the youthful mamma, has not yet completed its growth. The aberration of nutrition which produces these small fibrous hypertrophies of the breast-stroma appears largely due to direct pressure, but something must also be ascribed to indirect pressure-effects and to sympathy with the uterus, also struggling for unimpeded development. Moderate the injunctions of fashion in the matter of stays, tranquilize the nervous system, abolish tea, order some absorbent ointment, with *frequent* local friction, and the "lump" will vanish within a few weeks, seldom more than six. The application I generally prescribe is as follows: Pulv. plumbi iodidi, ʒj; lanoline, ʒvj; adipis ad, ʒj. This to be well rubbed in four times daily. Occasionally I have varied this with an ointment of green mercuric iodide, 20 grains to the ounce, employed night and morning; or have substituted 2 drachms of the (British Pharmacopœia) red iodide ointment for the same quantity of unguent. plumbi iodidi. With this, 15 grains of bromide of potassium are taken internally at bedtime, to subdue the always present neurosis. Proceeding on this method, I have not found

it necessary to subject any such case to operation since 1889 (i. e., the patient being a young girl); and then surgical measures were resorted to only in consequence of the individual's impatience. To sear the mamma with multiple scars is a practice meriting emphatic condemnation, and even such an operation as Thomas', designed to preclude subsequent marking, is hardly ever necessary. The following are cases in point, samples of many similar:

Case 1.—Ada N., aged 24 years, single, seen July 17, 1893. At the upper part of the left breast an induration of the parenchyma forming a flattened nodular tumor one inch in diameter. After a single week's employment of the unguent. plumbi iodidi, with lanoline, there was only a slight trace of the "lump."

Case 2.—Patty D., aged 23 years, single, seen January 15, 1894. To outer side of left nipple, flattened and indurated breast-tissue, constituting a "lump" one-half inch in diameter, one year's duration; conspicuously tight stays. On the 22d nothing abnormal could be felt.

Case 3.—Annie E., aged 20 years, single, domestic servant. Mamma large; ill-defined hypertrophic induration of outer half of left breast, of four years' duration. Treatment from October 28, 1889, till November 25th, then no tumor and nothing abnormal could be found.

Case 4.—Louisa Emily M., aged 23 years, single, shop-woman; out-patient April 28, 1890. At lower border of left breast a tumor the size of a hazelnut; noticed three years. Attendance till August 11; then "perfectly cured." Has since married and borne two

children; writes (December, 1893) to say he has no further trouble.

Case 5.—Annie J., aged 37 years, single, out-patient June 11, 1888. At the upper part of the left breast was a tumor of at least several years' duration, equal in size to a large walnut. Operation had been recommended by a cancer specialist. Under inunction by the lead iodide ointment thrice daily entire disappearance of the "lump" in seven weeks. Seen two years afterward; no further breast trouble.

Case 6.—Ellen O'K., aged 30 years, married, no children; out-patient January 19, 1891. Hard nodule the size of a pea to outer side of each breast; left largest. Intermittent attendance (from Colchester) for several weeks. On June 1st no trace of either was perceptible.

Case 7.—Amelia B., aged 24 years, single. Nodule the size of a large pea deep in gland-tissue of left breast. Attendance from April 4 to May 21, 1887. Use of the iodide ointment thrice daily, with entire resolution.

Case 8.—Rose N., aged 18 years, single. A tumor as large as a walnut, lobulated, at pectoral margin of left mamma, noticed eight months. Out-patient May 2, 1887; treatment until July 11, then lost sight of. In December, 1893, states in reply to inquiry, that some enlargement persists, but that all inconvenience has ceased, and that she has never required any further treatment.

Case 9.—Emma H., aged 19 years, single. At the age of 14 a tumor as large as an egg stated to have been removed from left breast; now scar three inches long at lower border. External to this, movable tumor size

of hazlenut. Attendance from October 3 to November 14, 1889: Seen on January 8, 1894, when no trace was to be felt.

Case 10.—Fanny S., aged 24 years, single. Induration of parenchyma at outer part of left breast, noticed eighteen months. Treated from November 8, 1886, to February 14, 1887, with complete resolution.

Case 11.—Marie W., aged 28 years. At upper and outer part of left breast the tissue was hard and nodular, forming a flattened tumor one inch in diameter; noticed two months. A neurotic girl, with the usual tight stays. Treated from January 2 till March 19, 1894, when only a faint trace of the induration remained. At first the lead iodide, with 2 drachms of red mercuric oxide ointment; subsequently the former, with 15 grains of alcoholic extract of belladonna to the ounce.

The preceding would appear to have been examples of the true "fibroma of adolescence" occurring in young girls, with no obvious cause other than tight stays and a neurotic habit. At a later period small indurated tumors, which cannot be regarded as due to arrested or perverted development and which commonly own an inflammatory origin, are met with. These similarly yield to local treatment.

Case 12.—Jane H., aged 44 years, married, no children. Out-patient August 26, 1876. In the left breast an irregularly nodulated, moderately hard duration of the parenchyma, noticed six years. Lancinating pain was described, but was referred also to the opposite breast, in which was another "lump" rather smaller. Although the age was so suspicious, a diagnosis

of non-malignancy was founded on the duration of the case and the simultaneous affection of both mammæ. Under the inunction four times daily of ung. plumbi iodidi, the condition wholly vanished in about eight weeks. On November 8, 1887, the date of the last recorded attendance, no trace of tumor was perceptible.

Case 13.—Louisa P., aged 34 years married, three children. Ill-defined indurated "lump" in left breast following blow three months previously. Inunction four times daily of ung. plumbi iodidi. Attendance from September 12 till December 19, 1879. Gradual resolution; on later date nothing abnormal to be felt.

Case 14.—Emma H., aged 36 years, married, four children. Softish movable "lump" at upper part of left breast, noticed three months; in right breast another smaller. A history of cancer in the family. By October 17 both tumors had all but entirely disappeared.

Case 15.—Eliza R., aged 38 years, widow. A hard ill-defined tumor at upper part of right breast, noticed two years. Treatment as usual from September 24, 1880, until January 7, 1881; then complete resolution, leaving no trace of abnormality.

Case 16.—Fanny S., married, one child two years of age. Blow from child seven months previously. Deep in left breast tumor the size of a walnut, freely movable. Treatment from December 1, 1882, until March 2, 1883, thence no trace perceptible.

Case 17.—Elizabeth B., aged 37 years, married, no children. In left breast hard nodule, size of large pea, noticed two years. Treated with unguent. hydrarg. iodidi viridis, night and

morning, from January 25 till February 15, 1888, with perfect resolution.

Case 18.—Emily W., aged 37, married, one child one year of age, not nursed. Tumor size of walnut, noticed six months, movable, at upper part of left breast. Treatment as usual till February 23, then nothing abnormal.

Case 19.—Mary D., aged 27 years, single. Out-patient November 19, 1888. Blow two months. Marked induration at outer part of left breast; great pain. On November 26 nothing to be felt.

Case 20.—Emma B., aged 34 years, single. Seen June 17, 1889. In left breast a nodule size of hazlenut, flattened, not hard, movable, noticed four days. On June 24, no tumor was discernible.

Case 21.—Martha P., aged 46 years, married, no children. On July 6, 1885, a tumor the size of a small orange, movable, elastic, at upper part of left breast. Duration one year. Attendance till July 20, then tumor much smaller. Not seen again, but writes (December, 1893) to say she has had no more trouble.

Case 22.—Eliza B., aged 37 years, married, two children, youngest eight years of age. Small lobulated tumor at lower edge of left breast, noticed six weeks. Occasional lancinating pain for several years. Treated from September 12 till October 17, 1892. Complete disappearance of "lump."

Case 23.—Mary L. P., aged 30 years, single. Blow eighteen months; pricking pain a fortnight. Tumor the size of a large bean at upper part of right breast. Treated from November 6; 1893, till December 4, then only a trace remained.

The following is a somewhat analogous instance of irritative hyperplasia in the youthful male breast.

Case 24.—Mr. H., aged 22 years, sent for consultation in May, 1891, by Dr. McElfatrick, of Mere. Irregularly lobulated induration of left breast, forming a flattened tumor one inch in diameter, noticed two to three months, and apparently caused by slight blows when jumping up to a clerk's high desk. Treated for three weeks with the lead iodide ointment, then for five days with lin. belladonna; complete resolution.

A third class of "dispersible" tumors is afforded by inflammatory conditions in, or cystic dilatation of, lactiferous ducts. And in this may be included small sebaceous cysts of the areola.

Case 25.—Mrs. F., aged 48 years, no children; subject to eczema of the areola. Just below right nipple prominent, very hard red swelling, size of hazlenut, noticed nine days only; no fluctuation. In great consternation, as an operation had just been advised by a distinguished gynecologist. Treatment from November 14, 1893, till December 2. Liniment of iodine locally for a week, then the lead iodide ointment; complete resolution.

Case 26.—Frances P., aged 37 years, single. Out-patient December 15, 1882. Small soft tumor, size of large pea, one inch from left nipple. After a single week's treatment only faint trace discoverable; no further attendance

Case 27.—Jane P., aged 27 years, married, no children. Above right nipple a pea-like nodule, evidently a dilated duct of fifteen months' duration. Treatment from April 6, 1891,

till April 20, then nothing abnormal found.

Case 28.—Emma W., aged 63 years. Sebaceous cyst of areola, blackish in color, size of pea, of two and a half years' duration. Seen October 28, 1889. By November 11, entire resolution.

As already hinted, treatment such as that indicated, if adopted for a malignant tumor, will only waste the precious time available for curative eradication before secondary infection has ensued; and it is of no avail for the cystic benign growths which appear during the devolution of the female breast. A prompt, and at the same time careful, diagnosis is therefore essential. After the adolescent period (25 years) even simple fibroma yield far less readily than before development is complete, and the earlier after their appearance these are dealt with, the better.—*American Journal of the Medical Sciences.*

BACTERIOLOGICAL EXAMINATION OF THE VAGINAL SECRETION DURING PREGNANCY.—With a view to determine the presence or absence of germs in the genital tract of the pregnant patient, where no possibility existed of contagion, Kröng (*Deutsch. med. Woch.*, 1894, No. 43) has made a series of examinations in the Leipzig clinic. He had 48 cases, and his results show that the natural resisting power of the tissues is the same to both spores and cocci. Streptococci were killed in a very short time. Two days is the longest time in which germs introduced within the body remained alive. The genital tract is aseptic in healthy women when from 40 to 72 hours have elapsed since the last examination.—*Am. J. M. Sci.*

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR

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Editorial.

THE FIRST AMERICAN SYM- PHYSIOTOMIES.

The subject as to who was the first to perform a symphysiotomy in this country has excited considerable interest. Dr. Charles Jewett, of Brooklyn, performed the operation in the latter part of 1892, but later a *claim* was made by Dr. Coggin that he had done the operation some six or eight months earlier. This claim, however, he was not able to verify by facts.

Dr. R. P. Harris, who has done much work in the collection of statistics, has remarked: "*In your reports and statistics wait until you hear from the tick-woods.*" It now appears that the operation was performed in Texas as early as April, 29, 1880, by Dr. Joel W. Williams, of William Penn, Texas.

He has reported three cases, the first on April 29, 1880, the second on July 15, 1884, and the third in May, 1889. All three of these cases, therefore, antedate any other case so far reported. A year ago the *Medical News* received a paper from Dr. Williams, reporting these cases, but it was so astonishing the editor refused to publish it until the matter had been investigated. The past year this investigation has been going on by the editor of the *News* and Dr. R. P. Harris, and the evidence obtained is so voluminous and so conclusive, that both the investigators are convinced of the truth of Dr. William's claim. The first case was for the delivery of an illegitimate child, the mother being only thirteen years old. Mother and child both survived. The girl had been in violent labor for eigh-

teen hours, and delivery was only possible by means of the separation of the pubic bones, which idea occurred to Dr. Williams spontaneously.

The second operation was done upon Mrs. S. W. Wicks, of Washington county, Texas, July 15th, 1884, for a badly contracted pelvis. In this case, even after the separation of the pubic bones, it was impossible to deliver except after the child's head had been perforated. The mother recovered, and gives her sworn testimony as to the truth of the claim. The third operation was done in May, 1889, upon a negro woman about eighteen years old. She had been in convulsions about thirty hours. The woman died, but the child was saved. This case was sworn to by B. F. Dobson, a wealthy and prominent farmer of Washington county, upon whose premises the operation was performed, and who assisted Dr. Williams in the operation, Dobson having once been a medical student.

In his editorial comment upon this report Dr. Gould says: "We could easily fill a whole issue of *The Medical News* with details and incidents in connection with these cases, especially of the first, and with excerpts from the letters of Dr. Williams, and every line, we are certain, would be voted of absorbing interest by our readers. We almost regret the lack of space to do so, and at least wish that a historic essay might be written concerning the matter. We can imagine no novel of more intense interest, no sociologic study more bountiful in instruction. Here was a man who spontaneously conceived, and thrice carried out, the operation of symphysiotomy before any American surgeon. He was

frankly deficient in preliminary education and placed in a frightful tangle of most distressing and possibly tragic circumstances, no hint of which we have been able to give. [Dr. Williams has sworn himself to secrecy in the first case.] He was surrounded by a set of conditions the dramatic interest of which we have scarcely seen equalled upon the stage. Through it all he has carried himself, and out of it all he has brought himself with a combination of shrewdness, and modesty, and probity beyond all praise. . . . The back-woods are often deficient in literary qualities, and in many of the arts of modern medicine, 'push' and self-assertion included, but they are often profoundly ingenious, and not seldom exhibit an unchronicled heroism quite equal to any that vaunts itself in populous places."

Dr. Jewett, in a letter to the *New York Medical Journal*, expresses himself as not thoroughly convinced as to the truth of these remarkable cases. He says: "An humble practitioner in an obscure settlement of less than a score and a half of people professes to be the first in all the world, outside of Italy, to follow the example of Morisani. Yet not a particle of medical evidence is adduced to support the allegations of the claimant. No other physician was present at the alleged operations, nor is the testimony of any of the doctor's colleagues invoked in proof of the truthfulness of his assertions. The acceptance of these reports is based in one case on the affidavit of the woman said to have been operated upon, and in another on that of an alleged lay witness. Coggin's claim, it will be remembered, rested on similar affidavits, a method

of proof for which a physician in good repute among his fellows could have no use in substantiation of a mere scientific statement of medical facts.

"Of one of his cases Dr. Williams says: "The pelvis was so contracted transversely that it was with some difficulty that two fingers could be passed"—a condition in which delivery by symphysiotomy could have been clearly impossible. Yet the child, he tells us, was extracted by forceps and saved, and that, too, after the mother had been for two or three days in labor, and for thirty-nine hours in convulsions. Singularly enough, no laceration, hæmorrhage, sepsis, or other operative complication appears to have occurred in any of these cases.

"Brilliant as were these successes, nothing was known of them, in all these years, by the local profession. Remarkable as was the surgical genius implied in so bold a departure as symphysiotomy would at that time have been, especially in a rural district, Dr. William's fellow practitioners, as diligent inquiry has shown, did not till now know that he made any pretense to operative work of any kind. Respectable physicians in the two counties in which the doctor has resided, including members of the State board of medical examiners, denounce the story as preposterous. Not one can be found who believes it. More than that, recent investigation by the local profession, as I am credibly informed, has disproved it.

"It is to be regretted that our distinguished American statistician should have lent his indorsement to such ill-founded claims as this and the Coggin recital. Until these reports of early

American operations can be made to bear at least the semblance of truth, the credit for the general revival of symphysiotomy must be accorded to Pinard, of Paris. So far as yet appears, he performed the first modern pubic section outside of Italy."

A TAX ON DOCTORS.

The doctors of this State must hereafter pay an annual tax of ten dollars into the State Treasury for the privilege of practising medicine! That is the edict of the mongrel Legislature which has been in session in Raleigh, and which has attracted the attention of the whole country by the many strange things they have done. But can an evil tree bring forth good fruit? Verily, no.

There is no class of men who give so much gratuitous service for the benefit of their fellows as do physicians. Physicians are the only class of men who, for the sake of humanity, use their best endeavors to destroy the very conditions which bring them work and upon which their support depends. The physician is subject, and expected to respond, to the calls of those who need his services, even when there is no prospect of remuneration, and even though those calls carry him into the presence of dangerous infection and require him to drive for miles through midnight storms upon roads which abound in pitfalls and dangerous places. When called to see the child of one of these legislators which may be sick of scarlet fever or diphtheria, he must not refuse though he does run the risk of conveying the contagion to his own household, and though his only reward, when the child is restored

to the ungrateful parent, be, "I'm much obliged, doctor, till you're better paid." And we venture to say that did the medical profession adopt a rule to serve no man until his past debts were settled, there would be many of those legislators, who voted to levy this tax, who would curse the ambition and chance that carried them from their plows and bar-rooms and placed them in the legislative halls of the State Capital.

With nearly every physician perhaps fifty per cent. of his work is done without any expectation of reward, and of the other fifty per cent. from a quarter to a third is never collected. Did physicians refuse to serve the poor, the counties would be obliged to employ medical attention for them at an expense of thousands of dollars a year. And when pesti-

lence visits a community the doctors would be condemned, and rightly so, if they should follow the example of others who might be able and flee for their lives, leaving the poor to perish in their helplessness. The doctor must stay and do, though he die, and this is often the case, and for this privilege he must now pay a license of ten dollars a year. It is a damnable outrage, worthy of the gang who perpetrated it, and we feel sure that among the first things done by the next Legislature will be the repeal of this section. In the meantime, we suggest to those doctors who may have to serve one of the solons (?) who voted for this tax, that they increase their charges to cover the amount of tax. If the legislator be a dead-head, as he is now, a dead letter, cast him off and let him go to ——? no, the county doctor.

Reviews and Book Notices.

A System of Legal Medicine. By Allan McLane Hamilton, M.D., Consulting Physician to the Insane Asylums of New York City, etc., etc., and Lawrence Godkin, Esq., of the New York Bar. Illustrated. Vol. II. Cloth, royal octavo, 738 pages. E. B. Treat, 5 Cooper Union, New York. 1894.

The publication of this volume will be appreciated by numbers of the medical and legal profession, for it completes the most thorough work on Medical Jurisprudence yet produced. The second volume is written and edited with equal ability with the first.

After a short chapter on the duties and responsibilities of medical experts,

by Mr. William B. Hornblower, Dr. Hamilton presents a clear and interesting essay on the medico-legal bearings of insanity, in which he considers the symptomatology, etiology, course and termination of insanity, and the relation of the various forms of insanity to criminal and civil acts.

Mr. Calvin S. Pratt contributes a short paper on the mental responsibility of the insane in civil cases, and Dr. B. Sachs furnishes an instructive essay on insanity and crime. The articles on birth, sex, pregnancy and delivery, by Dr. Currier, and an abortion and infanticide, by Dr. Charles Jewett, are carefully prepared.

Deserving of especial attention is the chapter on Surgical Malpractice, by Dr. George R. Fowler. This chapter should be read by all those whose duties make them liable to be called into court to defend themselves against the charges of an ungrateful patient. Suits for recovery for malpractice are becoming of more frequent occurrence, not, certainly, because less care is exercised by surgeons, nor yet, we believe, because patients are less appreciative, but because lawyers or shysters, who are anxious for fees and who persuade patients into thinking they can easily secure a few thousand dollars, are becoming more numerous. At the same time there are cases where a surgeon is guilty of malpractice, either intentionally or through gross ignorance. From such the patient should recover.

The work now completed is likely to be a standard authority for years to come.

Syllabus of Gynecology. Based on The American Text Book of Gynecology. By J. W. Long, M.D., Professor of Gynecology and Pediatrics in the Medical College of Virginia, Richmond, Va., etc., etc. W. B. Saunders. Philadelphia, 1895. Price, \$1.00.

Thus Syllabus is in similar style to Dr. Senn's Syllabus of Surgery. It is an outline of the teachings of the most advanced thinkers of the day, as set forth in An American Text Book of Gynecology. It will prove useful to teachers who use this text-book, to students, no matter what text-book they use, and may even be serviceable to the practitioner who desires to take a hurried glance over a certain subject. It is interleaved for the benefit of those who wish to add a note. The author has not "hesitated to differ from, or to add to, the *Text-Book*," whenever in his judgment it was best to do so.

Correspondence.

VIABILITY AT SIX MONTHS AND TWENTY-ONE DAYS.

Editor N. C. Med. Journal :

I desire to report the following case of early viability:

Mrs. G., newly married, had her last menstruation March 13th, 1891. She was delivered of a female child October 3d, 1891, being the two hundred and first day of gestation (six months and twenty-one days).

The child was twelve inches long and weighed two pounds. It required nearly an hour to establish respiration.

It did not cry at all. No nourishment was given except from the breast, and that not until the third or fourth day, for it was expected to die every hour. However, by great care its life was preserved, and the little girl is now over three years old, strong, healthy, and bids fair to live as long as anybody.

Very respectfully,

C. H. LEWIS, M.D.

Farmers, N. C.

Consider the merits of this JOURNAL and send your subscription—published twice a month—\$2.00 a year.

Abstracts.

ON THE CLINICAL CONFUSION BETWEEN DISTENSION OF THE GALL-BLADDER AND MOVABLE KIDNEY.—(Morris, *British Medical Journal*).—

Points of similarity in the two conditions which suggest a causal relation between them are (1) movable kidney and enlarged gall bladder are each much more frequently met with in women than in men; (2) the right kidney is many times more frequently movable than the left; and (3) movable kidney and enlarged gall bladder often occur in the same person. The explanation of the association of the two conditions in the same person is probably found in tight lacing. This, the author believes, causes displacement and mobility of the kidney, displacement of the liver and kinking of the gall ducts with the formation of gall stones as a result of obstruction to the ready flow of bile. Some of the symptoms which are common to both are, both may present a tumor in the right hypochondriac and umbilical regions, which may be capable of being pushed back into the loin or over to the left of the median line, in both the tumor is more or less firm, or elastic, and smooth; in both it may be very tender or not at all so; in either case it may be, or seem to be, round or oval, or shaped like an egg, a pear or a sausage; both may have either a resonant or dull note on percussion in front; both give rise to nausea, flatulence, pain after eating, and constipation; either may give rise to paroxysmal attacks of severe colic, the maximum intensity of which is referred to the situation below the ribs on the

right side of the abdomen. In enlarged gall bladder these attacks of colic are due to the sudden impaction of a gall stone in the cystic duct; in movable kidney to kinking or rotation of the ureter or renal vessels. Either may give rise to jaundice, gastric and intestinal catarrh, or even peritonitis, though neither does so in the usual run of cases. With either there may be considerable displacement of the colon and small intestine. In neither case does the condition of the urine help us, and sometimes it actually misleads, as there may be albumen in the case of distention of the gall bladder, or bile in the case of movable kidney.

There are some conditions of the gall bladder which render the confusion all the more probable; (a) the enlarged gall bladder is sometimes so much elongated and so curved that it assumes the reniform outline; (b) it can in some cases be pushed quite back into the loin and there felt with the fingers pressed into the ileo-costal space; (c) the liver in some instances is so much displaced towards the pelvis that the gall bladder, if enlarged, gets doubled back beneath the liver, and is felt more as a loin tumor than as an abdominal one. Conversely, there are some conditions of the kidney which cause it to resemble an enlarged bladder. (a) The kidney in some instances is tilted as on an inclined plane from behind forwards, with its lower end just behind the anterior abdominal wall, and then in position and direction it closely resembles an enlarged gall bladder; (b) the kidney is sometimes adherent to the right lobe of the

liver as well as to the gall bladder, the adhesions allowing of free movements of the kidney across the umbilicus as well as back into the loin, yet not without dragging upon the liver.

How can we diagnose the one class of cases from the other? The first and most important thing is to bear in mind that the enlarged gall bladder as well as the kidney is a frequent cause of *movable* abdominal tumor. This is far from being sufficiently recognized. The second is, always to inquire if there has been a distinct attack of jaundice. The third is that the tumor caused by an enlarged gall bladder can in almost all cases be invariably felt, whereas a movable kidney (unless also enlarged) cannot. The latter is sometimes easily detected, at others not at all. An enlarged gall bladder is always easily felt by pressure on the front of the abdomen.

Fourthly, the fact that the size of the tumor varies from time to time goes for nothing in the diagnosis, unless it is clear that with the diminution of the swelling there invariably follows a marked increase in the quantity of urine voided. Movable kidneys are frequently of smaller size than normal, and are often degenerated in texture as well as diminutive in size; but for all that they have a tendency to swell from vascular turgescence, or, if hydronephrotic, from accumulation of urine; owing to their shifting position they are also more palpable at one time than at another. A distended gall bladder also will vary in size if the cystic duct is blocked by a calculus which from time to time slips back into the gall bladder, and thus opens the channel for the escape of the pent-up bile or mucus. But with few ex-

ceptions there is always evidence of some swelling as long as the cause of the obstruction remains unremoved. Fifthly, a gall bladder with calculi feels much harder than a movable kidney.

A sixth feature is the range and character of the mobility. However free the movements of a gall bladder, they take place in the arc of a circle the centre of which is a point beneath the edge of the right lobe of the liver. Around this point the free or lower extremity can be moved to the left and to the right of a vertical line drawn through the axis of the swelling, and further in the direction towards the left than towards the right. It can be pushed upwards and it can be also pushed backwards; but unless the liver, as a whole, is unduly mobile,* the gall bladder cannot be pushed downwards towards the pelvis, though it descends a little on deep inspiration.

The kidney, on the other hand, moves bodily from place to place within the limits of its loose connections; it will go up or down or inwards towards the median line or beyond it, and it has an especial tendency to slip, like a greasy mass, beneath the finger-tips upwards and backwards, into its normal position—unless prevented from doing so by the pressure of the other hand on the abdominal wall above it. The kidney, in other words, has a tendency to spring back into its proper position in the loin; whereas the enlarged gall bladder, though it can, in many cases, be pushed so far back into the loin that its free end can be readily felt in the ilio-costal space behind, has the tendency to spring back again

*The whole liver is sometimes movable to a very remarkable degree.

to its position in the front of the abdomen.

In presence of a distended gall bladder it is generally possible to grasp the kidney, or at any rate its lower extremity between the two hands by pushing the tumor forwards and towards the median line with the back of the finger-tips of the right hand, and at the same time pressing forwards the loin with the fingers of the left hand. In this way the two organs are separately distinguished at the same moment. The kidney may likewise be thus found to move independently of the tumor formed by the gall bladder. This can often best be accomplished with patient lying on the left side.

In the descriptions of the symptoms of movable kidney too much stress is apt to be laid upon an undue hollowness and resonance, with diminished resistance, in the loin. These are very unreliable symptoms (1) because in some positions of the trunk and thighs there is much hollowness in the ilio-costal space when the kidney is in its proper place; (2) the mass of muscle and fat in this region often prevents a tympanitic note being elicited when the kidney is displaced; and (3) the natural position of the kidney is so much under cover of the lower part of the thorax that hollowness of the loin and resistance in the ilio-costal have no bearing upon it naturally.

Another diagnostic feature to which too much importance has been attached is the relation of the colon to the tumor. Normally the colon is on the outer side of the right kidney and the transverse colon below and behind the gall bladder; and Ziemssen pointed out that if the gut is inflated with air, the kidney is pushed backwards and

the gall bladder upwards. But it is so common for the ascending colon and the hepatic flexure of the colon to be considerably displaced inwards and downwards, especially when either of these affections exists, that the result of inflation is very misleading. The so displaced colon, on becoming inflated, will push the kidney upwards, just as, in the natural position of the viscera, it does the gall bladder.

Aspiration of the swelling has sometimes been proposed as a means of diagnosis; but apart from the danger attaching to this procedure (unless the tumor is adherent to the parietes) there is the further objection that the character of the fluid withdrawn may afford no assistance at all. In many cases the contents of a distended gall bladder are of a dropsical nature, very like the fluid of a hydatid cyst; in other cases it is glairy mucus quite unstained by bile; and in others again it is pus.

In the doubtful cases an exploratory incision is the only means of positively deciding the diagnosis; and as this is quite free of risk, it should be early resorted to, with full confidence that if the tumor be an enlarged gall bladder, the earlier it is dealt with by operation the better for the patient; and that if it be a movable kidney, nephrorrhaphy will relieve the symptoms and prevent hydronephrotic changes, which shortly destroy the kidney.

TAX BETTING FOR THE BENEFIT OF HOSPITALS.—The French Government compels a certain proportion of the money made by betting on horse-races to be paid into the treasury for the benefit of the public charities. Last year \$50,000 was realized.—*Ex.*

SALOPHEN FOR NEURALGIA.—Dr. Camina (*Therapeutische Monat.*) thinking from the composition of salophen that it would be more analgesic than either salicylic acid or phenacetin alone, used it in ten cases of so-called habitual headache—cephalalgia. The majority of cases treated had suffered from headaches for periods of months and years, and had tried all kinds of symptomatic remedies, such as antipyrin, phenacetine, caffeine, etc., without such benefit. In some of the cases the pain was localized to the forehead; in others it shifted to different parts of the head. One grain was given every two hours until pain was relieved. The patients usually said that the pains gradually subsided and disappeared completely after the third powder, but sometimes after the second. In one case six powders had to be administered before the desired result

was obtained. Besides the salophen treatment in cases where there seemed to be some organic trouble, other appropriate measures were resorted to, so as to postpone repetition of the symptomatic remedies as long as possible. In two cases of trigeminal neuralgia, in the territory of the supra-orbital nerve, salophen had a marked influence upon the pains, especially in one where the neuralgia followed an attack of influenza. Phenacetine had been administered for two and a half days without benefit, and the pains, according to the patient's statement, had become almost unbearable. After administration of 4.0 gm. salophen, in divided doses in the above-described manner, the pains subsided, but recurred on the following day, though not as violently as previously, so that the powders sufficed to produce complete recovery.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

February 21 to March 6, 1895:

Meriwether, Frank T. Leave of absence for six months on account of sickness is granted 1st Lieut. Frank T. Meriwether, Assistant Surgeon, U. S. Army.

THE NAVY.

Changes in the Medical Corps of the United States Navy for the week ending March 9, 1895:

Richards, T. W., Assistant Surgeon, detached from Naval Laboratory and Department of Instruction and to the U. S. S. "Minnesota."

Stoughton, James, Assistant Surgeon, detached from the U. S. S. "Minne-

sota" and to the Puget Sound Naval Station.

Hochling, A. A., Medical Director, detached from Naval Hospital, Chelsea, Mass., and granted three months sick leave.

Kindleberger, C. P., Assistant Surgeon, detached from U. S. R. S. Vermont and to the Norfolk Navy Yard.

Dunbar, Arthur W., Assistant Surgeon, detached from the Naval Laboratory and Department of Instruction and to the U. S. R. S. Vermont.

Parker, J. B., Medical Inspector, detached from duty in connection with the investigation of the Ford Theater disaster and to the Hospital and Yard Portsmouth, N. H.

McMurtrie, D., Medical Inspector, in addition to present duties to duty in connection with the investigation of the Ford Theatre disaster.

MARINE HOSPITAL SERVICE.

For the thirteen days ending February 28, 1895:

Carter, H. R., Surgeon, to assume temporary command of Cape Charles Quarantine during the absence of P. A. Surgeon T. B. Perry, February 27, 1895.

Kallock, P. C., P. A. Surgeon, is directed to rejoin Station at Cincinnati, Ohio, February 21, 1895.

Perry, T. B., P. A. Surgeon, to proceed to Brunswick, Georgia, Quarantine, for temporary duty, February 27, 1895.

Houghton, E. R., P. A. Surgeon, granted leave of absence for two days, February 18, 1895. Leave of absence extended five days, February 22, 1895.

Blue, Rupert, Assistant Surgeon, to proceed to San Francisco, California, for duty, February 23, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

We regret to learn that a younger son of Dr. W. J. H. Bellamy is in New York suffering an attack of appendicitis. We trust the operation which has been performed may be entirely successful.

Dr. Augustin H. Goelett, of New York, contemplates opening, shortly, a private sanitarium for the treatment of gynecological cases.

The Forty-sixth Annual Meeting of the Medical Association of Georgia will be held in Savannah April 17, 18 and 19, 1895. An interesting program has been arranged. Dr. W. F. Westmoreland is President, and Dr. D. H. Howell Secretary.

Annales D'Oculistique, the French Journal of Ophthalmology, established in 1838, has begun, with the issue of January, 1895, an English edition, published in New York under the direction of Dr. George T. Stevens.

The two editions appear simultaneously and contain the same articles.

Messrs. Parke, Davis & Co. are making good progress in the preparation of diphtheria antitoxin, and it will not be many weeks more before they will be ready to supply the remedy in limited quantities. This department is under the management of Dr. Chas. T. McClintock, of the Michigan University. The seven horses being immunized are young and healthy, having never worked and coming from a section where glanders is unknown.

The charge against Dr. Jackson, one of the oldest and most respectable physicians of Portsmouth, Va., is a very serious one. The sudden death of one of his patients was attributed by the coroner's jury to shock due to an operation performed by the Doctor in his office to produce criminal abortion. We sincerely hope that it will

be rightly proven at the further trial of the case that the operation was not criminal.

In applying plaster bandages they should first be soaked a few minutes in warm water containing about an

ounce of alum to the pint. The alum hastens the "setting" process. The bandages should be placed in the water upon end that they may become saturated more quickly, and the surplus water squeezed out before applying to the part to be bandaged.

Reading Notices.

PULMONARY TROUBLES.—After a practice of nearly thirty years, and quite an extensive one in regard to pulmonary troubles, having used all of the emulsions, maltines and different preparations that are recommended for said troubles, I find Terraline one of the most efficient and pleasant preparations that I have ever prescribed,

W. I. MOORE, M.D.

Clay, Ky.

I have prescribed "Harris Lithia Water" in my practice, and am delighted with it in those cases in which it is indicated. In all those conditions in which there is uric acid in the system, in gouty and rheumatic diathesis, in cystitis and endo-cervicitis, causing painful micturition, in renal dropsy and dyspepsia, due to torpid liver or constipation, I have found the best results from this mineral water. Indeed, it may be used to advantage in which its formula may suggest itself, especially where Lithia is indicated. I recommend it to the public, and believe there is no superior Lithia Water in this country.

J. M. KIBLER, M.D.

J. MILNER FOTHERGILL ON COOKING STARCHY FOODS.—In one of his popular and readable treatises on the subject of digestive disorders, this well-known author says: "By cook-

ing, starchy foods are partially digested; consequently we see that intuitively, and without the light of science, man has commenced the artificial digestion of starch when only a savage and long before the dawn of history. We are now emerging out of the early darkness and stepping forth in the morning light on the path to the artificial digestion of starch—by so doing economizing the body energy which would otherwise be consumed in the conversion of insoluble starch into a soluble saccharoid." Paskola, the new medicinal food, is a *completely* pre-digested starch. It is more than this, for it presents albumen or meat-digesting ferments in combination with its starchy basis, and therefore insures the digestion of other foods in the stomach. The medical profession have long recognized the want, or rather the necessity, of a palatable form of pre-digested starch, but until Paskola made its appearance such a thing was not to be had. To insure the assimilation of starch by administering it in an artificially-digested condition, not only conserves energy as pointed out by Dr. Fothergill, but it practically guarantees an increase in weight. Thus it is that Paskola has met with such phenomenal success as a flesh-producer, and its digestive properties make it almost a specific in many forms of gastric indigestion.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, APRIL 5, 1895.

No. 7.

Original Communications.

A CASE OF TWIN LABOR WITH ABNORMAL PRESENTATIONS; WITH COMMENTS ON THE INCOMPETENCY OF MIDWIVES.

BY J. THOMAS WRIGHT, M.D., Salisbury, N. C.

On October 2d, 1894, I was hastily summoned to attend a woman who, the messenger informed me, was in the throes of labor, and had been for some hours, yet was unable to give birth to the child, and was "in a bad fix, Doctor"—an assertion which I fully corroborated later.

Upon arriving I found a midwife in attendance and the woman upon the floor on her knees, with her elbows on the bed, perfectly nude and an arm presenting through the vulva.

The midwife was urging her to "bear down"—with the uterus in imminent danger of rupturing from the force of the pains already present—while all were in a state of utmost perturbation and confusion, which the increasing

groans and lamentations of the unfortunate woman did not tend to ameliorate.

I finally succeeded in calming the agitated and lachrymose midwife sufficiently for her to inform me that it was a twin labor, and that one child had already been born by breech-and-foot presentation, and that the woman had been in labor with the second four or five hours.

I at once had the patient to get upon the bed in the supine position, and cautioned her not to force her pains.

I prepared my hands antiseptically, and, upon examination, found a transverse presentation, the left arm and shoulder filling the pelvic cavity and visible through the vulvar fissure—the

arm protruding—while the head occupied the right iliac fossa and the breech the left, the position being R. D. A. A loop of the cord protruded some inches and was compressed to such an extent as to abolish circulation.

Pain followed pain in rapid succession, and their intensity was frightful. The womb being unable to expel its contents, was forced directly upwards, somewhat in the shape of a cone, and its walls dangerously thinned; indeed, I was quite apprehensive lest the uterus should rupture, and, replacing the cord and discolored arm, I attempted, without an anesthetic, to perform cephalic version by the external, internal and bi-polar methods, but without success. I then tried to perform podalic version by the same methods, with the same result.

As the pains were increasing in severity and the woman suffering most acutely, I decided to use an anesthetic at once. Giving a hypodermic of atropia sulphate and some whiskey, per orem, I administered chloroform (somewhat concentrated), and soon had her well under its influence.

The pains diminished after the first few whiffs, and soon ceased altogether. Giving the chloroform to the patient's husband and instructing him how to use it, I decided to perform podalic version, and proceeded to make examination preparatory to doing so. I found the os uteri lacerated in several places, and the anterior portion, or wall, of the uterus considerably, not to say *dangerously*, thinned. The perineum was also slightly lacerated.

Washing my hands in a carbolic acid solution and anointing them, I introduced my hand some distance into the uterus, and, after distinguishing the

feet from the hands, with some difficulty brought them down consecutively. By way of parenthesis I may say here that it is by no means easy to distinguish a hand from a foot in utero.

As uterine contractions were entirely absent, I made gentle traction on the feet, with pressure from above, and brought the child down without difficulty until the shoulders became engaged. As the arms were extended, I next brought them down by hooking my finger above and behind them and pulling them forward across the face and downward.

The head next gave me considerable trouble as it was large, and there was complete uterine inertia. The occiput became engaged under the pubic arch, while the face filled the concavity of the sacrum, and as there were no contractions of the uterus, the head remained in that position—the cord posterior—and it was sometime before I could deliver it by Kristeller's method and traction from below combined.

The infant, a large male, was dead, the circulation having been abolished by pressure on the cord some time before the midwife consented to send for a physician. Methods of resuscitation were used patiently and persistently, but without avail.

It was a sad scene—an unconscious mother and a dead child! But it was only one of the many examples of the result of trusting to the ignorance and fatuity of an incompetent and unscientific midwife.

By proper treatment at the onset, in all probability a great deal of suffering would have been avoided and the child's life saved. But how many, how very many lives are entrusted, through choice or necessity, to these syco-

phantic *ignorami*, who, with their knowing air and stately tread, deliberately transgress all the laws of hygiene and asepsis, inviting puerperal septicæmia with its dangers and distress, as well as numerous other diseases! Ah! how many!

In this case the midwife had examined the patient with septic hands, had used cold water in a foul basin to wash the patient after the first birth, and had, in her verdancy, made strong traction on the child's *arm*; and after I had delivered it and placenta, wanted to place a dirty cloth on the vulva "for a spell 'til she come to"!—a procedure to which I strenuously and emphatically objected.

Cannot this evil be eradicated, or, at least, ameliorated? As progressive, scientific men, I ask the physicians of our State.

Pioneers in the advancement of medicine in other lines, will they not be also in this—a most vital one!

If the evil cannot at once be removed, cannot a law be enacted compelling all *practising midwives* to take a four or five months course in obstetrics and

anatomy, physiology, materia medica and surgery—as they relate to obstetrical cases—under some competent physician? It seems possible. Certificates could be issued by their preceptors, after examination, as evidence of their attendance.

This would be a great advancement in the right direction, and the experienced and more progressive in the profession should seriously consider the matter, freely discuss it in our JOURNAL and societies, and devise means to elevate the standard in this important branch, thereby protecting themselves and the citizens of the State as well.

Returning to the case, I may add that the lacerations were sutured and that the patient progressed nicely with antiseptic vaginal injections and small amounts of antikamnia, together with laxatives.

The breasts caused no real trouble, nor were there any unfavorable symptoms, and the woman sat up at or near the usual time—all due, no doubt, to the careful and thorough use of antiseptics.

CLIMATE OF NEWTON, NORTH CAROLINA, IN CONSUMPTION.

BY JAMES R. CAMPBELL, M.D., Newton, N. C.

Outside of the specific treatment of phthisis pulmonalis, all physicians know that cases of undoubted consumption do recover under judicious treatment and management. In this management climatic and hygienic measures are of the first importance. Experience has shown that certain places are almost, or entirely, free

from the disease, and that properly selected cases improve and recover there.

It is of such a place I wish to write. Twenty-four years of observation and experience have so firmly convinced me of the inestimable value of this place in the relief and cure of consumption, that I feel it a duty to call

the attention of physicians to the facts.

I know no scientific reason why this little town should be better than its neighbors in this respect. I only know that experience has shown me that it is, and that persons coming to Newton from no greater distance than twenty miles, have at once begun to get relief and have recovered from phthisis, even when the loss of lung tissue was very great. I know, too, that consumption almost never originates here. Even the acute diseases of the air passages are so rare that I have been in full practice without seeing one case of pneumonia for periods as long as five years. Of consumption itself, in a population of from 1,200 to 2,000, there have been six deaths here—three of them were far advanced in the disease when they came—in twenty-four years.

I could give you numbers of instances in which family histories confirm my proposition—instances where families have grown up here and separated, part going away, part remaining, when those who went away afterward died of consumption, while those who remained are well. But space at my command permits me to give the history of one family only.

P. F., a Pennsylvanian, came to this place early in the century. He married and reared a family of nine sons and seven daughters. The sons emigrated South and West. Some married, but all except one died early of phthisis. This one married, returned to this place and brought up a family of seven sons and three daughters. The eldest son and daughter settled here and are now living here in good health at about fifty and forty-eight years of age

respectively. The second son went South and two years afterward died, after six months illness, of tubercular consumption. The third son also went South, lived three years and was attacked with tubercular laryngitis and phthisis, and died within the year. The fourth one, a railroad bridge builder, was away from here six years before the same trouble cost him his life. The second daughter married, moved away and twelve years afterward died at her home in a southern state of phthisis. The fifth son went to Texas and has not been heard from for several years. The last news reported him ill with consumption. The third daughter went to make her home with a relative in a neighboring State, After living there two years, she was attacked with hemorrhages from the lungs, and all the symptoms of consumption rapidly developed. About three months after the hemorrhages began she was brought back here, confined to bed, emaciated, with hectic fever, night-sweats, constant cough and evidence of forming cavities. It looked as if she would soon die. But she began to improve, and, after a steady improvement for eighteen months, she was considered well, and now, a year afterward, she is in good health and shows no sign of lung disease. The two youngest brothers live here and are in good health at twenty-eight and thirty years of age.

Do you say that all of this is a co-incidence? It is a very remarkable one. And when case after case of the same character can be produced, is it at all strange that I have come to believe that cases of consumption, when not too far advanced, are certain to be

vastly benefited, if not cured, by a residence here?

I believe it, by far, the best Winter Resort on the Atlantic seaboard, if not on the American Continent, for tuberculosis of the lungs. This is the opinion formed deliberately after thinking over and studying the subject for fifteen years or more.

To send a patient, in the last stage of consumption, away from the conveniences and comforts of a home to die among strangers, is inhuman, and the practice should be denounced. But cases that can be benefited by climate can, in my opinion, find no better place than Newton, Catawba county, North Carolina.

***CLINICAL LECTURE—THREE OPERATIONS FOR EXTRACTION
OF CATARACT—ONE ARTIFICIAL RIPENING OF
SENILE CATARACT.**

BY JAMES MOORES BALL, M.D., Professor of Ophthalmology and Otology in the St. Louis College of Physicians and Surgeons; President of the Tri-State Medical Society of Iowa, Illinois and Missouri.

To-day, owing to the abundance of clinical material at my disposal, I shall show you several cases of cataract on which the operation of extraction will be performed. I always extract without the iridectomy unless a specific reason exists for the making of an iridectomy. This is a more difficult operation, but, if all goes well, the patient is left with a nice round pupil, in place of the large coloboma of an iridectomy.

Case 1.—The first patient, a colored woman who does not know her age, presents bilateral cataract. Each eye is ready for operation so far as the ripeness of the lenses is concerned. We will operate upon the left eye. The patient's face has been thoroughly cleansed, the conjunctival cul-de-sac washed with a 1-2000 solution of bichloride, and cocaine has been instilled.

We insert the Knapp speculum; you will notice the palpebral opening is unusually small, causing the woman to look like a Mongolian. The distance from the inner canthus to the root of the nose is greater than usual, and the eye is small. This state of affairs will make the operation more difficult than usual. Not being ambidextrous, it will be necessary for me to stand in front of her in operating upon the left eye.* A few instruments are now handed to my assistant and we begin. The eyeball is turned downward by forceps held in my left hand and a small Graefe cataract knife is passed through the apparent corneoscleral junction and brought out at a point opposite. Now, by a gentle sawing motion the cut is made, the knife is laid aside, a cystitome of the angular variety is passed into the eye, turned on its axis and made to incise

*Delivered before a section of the senior class of the St. Louis College of Physicians and Surgeons, January 31, 1895.

*The writer has recently learned to extract cataracts with his left hand.

the anterior capsule of the lens. Now, stepping behind the patient, I take the cataract spoon in one hand and a spatula in the other and deliver the lens. You will notice that considerable pressure is required—more than in the operation with an iridectomy, since the resistance of the iris must be overcome. The iris, by its own elasticity, withdraws into the eye, but the pupil is not in the center of the cornea. After cleansing the eye of all fragments of cortex, we will gently stroke the iris back into place, leaving it with a central pupil. The speculum is now removed, the lid is closed gently and a moist dressing of bichloride applied. The other eye will be bandaged.

Case 2.—This man, Mr. H., aged 60, a German, was operated on some time ago by some one who removed a cataract from his right eye; the result was not satisfactory, and he wants me to remove the opaque lens on the left side. He cannot count fingers, but readily tells the location of the windows. Having him well prepared for the operation, I will now remove the cataract. This is a much easier case upon which to operate. The eye is of good size, the palpebral fissure of normal width, and the eye promises a good result. You notice that I pick up another knife, it being my purpose never to use a cataract knife the second time without sharpening it. The knife and other instruments are dipped into boiling water for a moment. I pass the knife in the usual manner and the section is made without a hitch, and those who are near to the patient will notice how the cornea collapses after the cut is made. The capsule is now ruptured in the usual manner and the delivery effected without difficulty.

The dressing of this eye will be similar to that of Case 1.

Case 3.—This old negro, like many of his class, does not know his age, but he appears to be about 70. He has been blind in both eyes for three years. Each lens looks white like milk, and it is in such eyes that we find Morgagnian cataracts—one with a hard nucleus surrounded by liquid. You will observe here a marked arcus senilis. This, however, has no bearing upon the healing of the wound. The usual incision is made, only smaller than in the preceding cases; the capsule is ruptured and now you see the milky substance running out of the capsule. It is a case of Morgagnian cataract. The hard part of the lens is delivered through the natural pupil. In this case the iris remains in contact with the lips of the wound. The pupil has been cleared of all debris and the iris has been stroked back into place, but immediately prolapses. Perhaps the use of an eserine solution would keep it in place, but I will not take any chances. The iris is cut off, the angles of the iris are freed from the corneal wound, and the usual dressing applied.

Case 4.—This man has noticed failing vision for two years. Inspection shows bilateral immature cataract. He readily counts fingers at six feet. It is in such cases, where both lenses are becoming opaque slowly, that an operation for artificial ripening is indicated. There are many methods of procedure, all of which have been advanced since 1881, when Foerster, of Breslau, began his operations. He was in the habit of making an iridectomy, after which massage of the lens was made by a strabismus hook, the collapsed cornea

intervening between the lens and hook. It was an indirect method. The operation which I prefer, and which bears Bettman's name, is a direct trituration. The pupil is widely dilated by atropine, the usual antiseptic, and cocaine solutions applied, and we commence. I introduce a keratome into the anterior chamber, not for the purpose of performing an iridectomy, but simply to make an opening. Through this opening a spatula is passed, and, by a concentric motion, the anterior capsule of the lens is trituated. Care must be taken lest we rupture the suspensory ligament and get inflammatory symptoms. We desire to break up some of the fibres of the capsule so that some

of the aqueous humor may come in contact with the lens. The lens will absorb aqueous, swell up and ripen in a few weeks. Hence, such cataracts which otherwise might require years for maturity, will often be ripened and removed within five or six weeks. The spatula is withdrawn, a few more drops of atropine instilled and the eye is bandaged. The nurse is instructed to apply atropine twice a day and the bichloride dressing is used. As you see, I have made no attempt to hurry. Where everything is properly planned and systematically executed, an oculist can remove a half dozen cataracts within the limit of an ordinary clinic hour.

Selected Papers.

HOW TO DO ABDOMINAL SECTION WITHOUT FUSS, FEATHERS AND FOOLISHNESS, WITH IMMUNITY FROM SEPSIS.*

By JOSEPH PRICE, M.D., Philadelphia, Pa.

The profession was very slow to acknowledge the correctness of the pathology of pelvic diseases in women, as demonstrated by Bernutz and Goupil. Their almost mathematical presentation of the subject was received with ill-expressed disregard, and characteristic criticism, both harsh and unprofessional. Mr. Tait did much to open the way for the ultimate reception of their views, and his work must always stand a monument to the period of the most remarkable progress in

modern surgery. Cavilers may carp, and envy strive to belittle, but to the minds of the generous and just, there is no question as to his merit. From 1872 to 1888 there was a remarkable regularity in the advancement of both the theory and practice of pelvic surgery, but since this latter period there is much to discourage the practical and progressive mind, which is never satisfied to abandon progress, or to go forward, looking backward, or to be satisfied with obsolete or obsolescent methods. If we take the trouble to look up the papers of this latter period,

*Read before the Medical Society of the District of Columbia, November 28, 1894.

we shall find them already quivering with doubt and quavering from disaster. Many men who, without training or drill, or previous education in any branch of medicine, rushed into the abdominal field as the road to ready fame, have begun to retrace their steps, doubt the correctness of their absolutely ignorant, but no less positive statements, and to hedge behind their so-called conservative opinions, for which their crude work had built the foundation. This had been well had it only reacted upon themselves, but the effect was of wider extent, and the reading profession were misled into considering their cry for quarter, as an honest surrender. This defecation, indeed, has got beyond the line of current literature, and invaded the presumably standard books of the day. Men who are supposed to be an authority on what they write, because they are backed by medical colleges and standard publishers, are deluding the profession by a counterfeit presentation of experience, and present that as general which is only the shady result of their own limited knowledge, which presumes to teach, while it has yet all to learn. The pathology of these pseudo-instructors is at fault, and their conclusions, surgically considered, are not to be trusted. Of pathology, there must be a working knowledge, not necessarily a microscopic one, but such information as will enable the operator to understand what he is likely to meet, why it is thus and so, and the results of certain complications, and the necessity of dealing with each one specifically as it arises. To start out in any line of work, with a fair show of success, there must be a preparation both sub-

jective and objective. The objective preparation in pelvic work is applied to the patient. She is to be duly purged and her intestinal tract thereby freed from *débris* which may interfere with post-operative comfort. An empty bowel has better tone than a distended one. For the purpose of catharsis, calomel and salines should be used, according to the peculiarities of the patient. Light, simple, liquid nourishment is to be preferred, while in feeble cases the antecedent administration of strychnine is of value. The patient is to be thoroughly cleansed and kept clean, while all the rules of personal cleanliness are to be applied both to the nurse and the surroundings of the patient. It often is questioned whether successful operation can be done in and under conditions which do not permit of rigid cleanliness, so far as the room itself is concerned. My answer, from an extensive personal experience is, that the best results have been obtained, under the most adverse conditions, but these have only been reached by extra care and painstaking avoidance of accidental introduction into the immediate field of operation the filth of the surroundings. This last assertion is to be taken literally. Cleanliness by soap and water is all that is required. I do not use nor advocate the use of any chemicals whatever, and consider that the operator who has need of corrosive poisons to render him fit for the operating table, had better take a months vacation to prepare himself for the safety of the patient. Chemical solutions bring into the field of operation an additional danger of irritation. This is great enough owing to the nature and character of the interference.

Here, as in all other operations, the less the paraphernalia and complexity, the less the danger of annoying delays and impediments to speedy and careful, uninterrupted work.

The incision should be as short as is consistent with the removal of the diseased part. This is of importance also at the close of the operation. The smaller the incision, the less we have to deal with in closing. If the tumor is irreducible, the incision must be longer than otherwise. Adhesions are to be dealt with as they are found, and not passed by. Ligation of bleeding points must be carefully attended to. All points of bleeding do not necessarily require a ligature. The hæmostatic forceps very readily controls many of these, especially in the incision. Too numerous ligatures introduce an irritating element into the surgery of the pelvis and abdomen whose evil is far-reaching, and should be avoided. All pathological conditions should be removed as they are discovered. Adhesions freed, *débris* consequent upon these removed and the really diseased organs carefully separated and tied off. Leaking vessels must be controlled and must be primarily handled so as to excite as little hæmorrhage as possible.

This is accomplished by breaking the adhesions down with the cushioned end of the finger, using the nail practically not at all, and the scissors or knife never, unless where it is absolutely necessary to tie. After adhesions are loosened and ligatures placed, the toilet is to be looked to. Drainage is the most essential feature, and this is begun by flooding the abdomen. The abdominal douche is as necessary for successful surgery in the peritoneal

cavity as is soap for common cleanliness. The sneerers at drainage all with common consent acknowledge the efficiency of flooding out the abdomen to clear it of *débris*, pus clots and the like. Not only does it do this, but it is a powerful stimulant in shock, and enables many a successful recovery to be made, where otherwise we would lose our patient. By drainage, I mean glass drainage, not a gauze masquerade, simply continues the good work initiated by abdominal flooding. It permits the escape of lymph, the smaller clots, the serum from the irritated surfaces, and conduces to bringing the peritoneum into a more natural condition. Gauze simply abstracts fluid as such, and does not permit of the elimination of anything else whatever. It is interesting to note in this connection that those operators who so bitterly opposed drainage some little time ago, now commonly pack the pelvis full of their so called gauze drain from vagina to and through abdominal incision, and with the same consistency yet violently oppose supra-vaginal extra-peritoneal hysterectomy, which, when perfectly done, does away with all intra-peritoneal tinkering, and closes without even leaving a sinus. All gauze-packing opposes prompt healing, except that by adhesions, and therefore the less of it we use, the better we are off, except in those cases in which it is desired to wall off a cavity, such as the seat of a suppurating appendix, which it is impossible or rash to remove at a primary operation. The closure of all abdominal wounds should be made with silkworm gut. This makes a perfect splint for the abdominal walls, is non-irritating and safe. For other needs of abdom-

inal work, I find fine silk the desideratum; it has many advantages over catgut, but, above all, is safer and cleaner. Again, it is much stronger in the finer threads, and therefore permits the use of a less bulky thread. After the essentials of the operation comes the after-treatment. Here I find no reason to diverge from the lines I have so often laid down, to wit: that rest, position and simple diet, without anodynes, are the essentials. I do not allow my patients to be shifted for the first twenty-four to thirty-six hours, for the reason that in abdominal wounds and tying, absolute quiet, I hold, is just as essential as in other surgery, such as that of bones or plastic work, and, after all, much of abdominal and pelvic surgery is only plastic work on a large scale. Milk should be avoided as a diet in most cases. Anodynes are not indicated, save in those cases in which the opium habit has been previously contracted and the operation urgent.

The vast majority of patients are better without it, in every way, physically, mentally and morally.

So much for the real necessary common-sense of abdominal section.

As to the opposite of this, in all that pertains to abdominal work of every sort, there has been so much written and so much said, suggested and attempted, that just at the present time we are in a tremendous muddle. Men who do not know how to drain cry out: "There is no need of drainage in abdominal work. The man who is in favor of it is a dirty operator." These same men would not argue drainage away from other branches of surgery, and yet in the abdomen, where in many cases the dirt and

débris are boundless, they waive this important step in the technique of abdominal section aside, forgetting that assertion is not argument.

These same men are ever ready to adopt anything new or original, be it suggested by a nightmare or hypnotic ecstasy, only so it attract by its air of novelty, be it by a patent abdominal sewing-machine or a new German Salvation vacuum, wherein both patient and operator are made to breathe sterilized ethereal ozone and perspire some never-failing, never-ending antiseptic.

Boiling water to these ogles of foreign fads has become so cool that it will no longer scald or cleanse (at least so it is believed in Germany, where they ought to know), and in its stead is imported a real German bake-oven, which can be heated hotter than the scriptural fiery furnace, and the little sinning microbes, unlike Shadrach and the other two, cannot stand the strain. All this is a combination of fuss and feathers. Let us see. Instruments baked, assistants oxalated, permanganated, bichlorided, floor tiled, with the chance of three out of five of the nurses menstruating or ending it up with a discharging irritating leucorrhœa, with the water-supply and drain communicating directly with a sewer, and the operation attended, perhaps, by fifteen or a dozen men, all of whom have come from filthy street-cars or dirty carriages, or, perchance, even from stables, if, perhaps, they have an oversight of their own conveyances. This is fuss, feathers and foolishness. The trouble is that too many err in imagining that cleanliness comes from antiseptics. This is not so. The man who cannot be clean without bichloride, cannot be clean with it.

Being clean by spasm is trying to become a society man by buying a dress suit. It is all right for theory, but it won't work. If looks were all, and nothing back of them required, the goal would be reached; but not so. Put it down that the men who dwell the most on the ultra-refinements of Listerian surgery, do so only in the hope of succeeding some way to overcome failures, in themselves, which they are loth to acknowledge.

This is not fuss or feathers or foolishness alone. It is false pretense. He parades to the learner and to the outside world that all surgery is reduced to the hoo-doo of chemicals, or the Trendelenburg position, and that these make surgeons and surgery easy. We are waiting for the book, *Every Man his own Surgeon: A Crying Need to Protect us from Quackery*.

Fuss in surgery is of two kinds, as are most other sensations, subjective and objective. Objective sensational fuss is of the sort I have briefly and generously and gently referred to, withal, seriously. Subjective fuss is due to the natural tendency, drilling and disposition of the operator. I have known an operator to leave his patient before closing the incision to discuss a specimen removed. Only a pathological devotion completely overshadowing the surgical instinct, can explain a freak like this. In my work I hate stupidity, whether in assistants, nurses or on-lookers. I hate it worse in myself. When I quarrel with myself in my work, I know I am a ring-leader in a conspiracy against the life of my patient. If I learn that an operator curses his sponges, nurses, damns the eyes of his needles and sends his knife to a place hotter than

his Dutch bake-oven, I look for many of his patients in another direction.

One thing an operator has to learn. He is the head, judicial, legislative and operative in all that concerns his patient. He is bound to see that all is in working order before he begins work. He is to know that all around him are trust-worthy and efficient. If he is in doubt about this, he has no right to begin work.

If he begins work without skilled assistance, he must know himself capable of going through it without assistance. In the event of failure, he has no right to bulldoze those around him or lament their inefficiency. Subjective fuss combined with objective feathers reduces surgery to a farce and the operation often to a tragedy.

THIOL.—Dr. Dillon states that this drug differs from ichthyol in that it has no disagreeable odor; the internal administration is not accompanied by disagreeable gastric disturbance; used externally, it does not more than slightly stain the clothing, and even this can be removed by washing. It seems to be especially curative in the different forms of eczema, acne, herpes, erysipelas and other inflammatory processes. In contusions and subcutaneous hemorrhages it possesses wonderful power of causing the absorption of the poured-out material. It has also been found useful in rheumatism.—*Notes on New Remedies.*

The meeting of the North Carolina Medical Society is near at hand, and *now* is the auspicious time to send your subscription to this JOURNAL. What say you, Doctor.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR

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Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

All communications, either of a literary or business nature, should be addressed to, and remittances made by P. O. Order, Draft or Registered Letter, payable to ROBERT D. JEWETT, M.D., P. O. Drawer 810, Wilmington, N. C.

Editorial.

NORTH CAROLINA BOARD OF HEALTH—FIFTH BIENNIAL REPORT.

We have received the Fifth Biennial Report of the North Carolina Board of Health as submitted to the Governor by the energetic and efficient Secretary, Dr. Richard H. Lewis. The report makes an octavo volume of two hundred and forty pages, and shows plainly that the motto of the Board is aggressive warfare against disease and education of the masses in sanitary matters. The wise laws enacted by the Legislature of 1893 placed the Board in position to do more practical, result-producing work than ever before, and the report of the Secretary shows that the opportunity was made much of. The section requiring all physi-

cians to report immediately to the Superintendent of Health cases of contagious disease occurring in their practice and the quarantining of these cases by the Health officer, has been generally observed, and without doubt has prevented in many cases a spread of the disease with many resulting deaths.

As we have before urged, a reliable system of vital statistics is absolutely necessary before it is possible to demonstrate the beneficial effect of organized sanitary effort. At least in the larger towns of the State this can be had if the town authorities will enact ordinances following the admirable form suggested on page fifty of the report. At present there are no statistics required of marriages and births. Mortuary reports (not alto-

gether reliable) were received during 1894 from thirty-one towns with a population of 87,350 whites and 61,000 colored. The total death-rate from these towns was, for whites, 10.6 per thousand, and for colored 17.5. The rates for 1893 were 13.18 for whites and 20.25 for colored, thus showing a decrease in the rate for each race of about 3.0 per thousand. We hope that the matter of adopting better health ordinances will be again pressed upon the town authorities, and with better results.

One of the most interesting features of the volume is that embracing the proceedings of the Board in Convention at Salisbury. We believe it to be the intention of the Board to have these Health Conferences, or Sanitary Missionary Meetings, as the Secretary happily styles them, in two or three different sections of the State each year. We know of no plan more calculated to bring the Board into contact with the people, thus giving them practical information upon health matters, awakening the masses of the different neighborhoods to the vital importance of bettering their sanitary condition and letting them see for themselves that the State Board of Health is the zealous custodian of the health and lives of the people of the State. As soon as they really understand this, fears for the life of the Board need harass us no more.

Among the excellent papers read at the Health Conference were one on the Prevention of Tuberculosis, by Dr. S. Westray Battle, and one on Drinking Water and Malaria, by Dr. Richard H. Lewis, both of which are prepared for the special instruction of the laity. These papers have been

printed in pamphlet form for distribution, and the Secretary of the Board, at Raleigh, will cheerfully furnish to any of our readers in this State as many of either paper, or both, as they will distribute. The paper on Drinking Water and Malaria should be placed in the hands of every family in the eastern section of the State.

The report is very full and satisfactory, and we congratulate the State upon having so efficient and energetic an officer acting upon our health board.

THE GOLDSBORO MEETING.

The coming meeting of the State Society promises to be a memorable one. Goldsboro being situated at the intersection of the Southern Railway and the Atlantic Coast Line is very accessible and indications point to a large attendance. Reduced rates will be given by all the railroads in the State and the hotels have made the unusually generous rates of \$1.50 per diem. We are assured that there will be ample accommodation for all. The local profession are already arranging the social features, which will undoubtedly be especially pleasant. We have had an inkling as to the nature of this entertainment and know whereof we speak. The sessions will be held in the Opera House, which is very convenient to the hotels, and the Board of Examiners will hold its sessions in the Armory. Both of these halls are well suited to the purposes for which they will be used, so that the Society will be more comfortably provided for than is usually the case.

We would again remind members

who intend to present papers that the titles should be sent in to the Secretary, at Wilmington, by the 15th of April, so that they may be given a place on the program. We would also remind authors of papers that, even with the limitations placed on the read-

ing of papers and the discussions at the last meeting, there were several voluntary papers crowded out, and we would urge them, therefore, to boil their papers down as much as will be consistent with a thorough and intelligible expression of their views.

Reviews and Book Notices.

A Manual of Bandaging. Adapted for Self-Instruction. By C. Henri Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology in the Detroit College of Medicine. Sixth Edition, with 139 Engravings, Cloth, octavo, 189 pages. Price \$1.50. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

The main feature for commendation of this book over other similar works is that each illustration shows the direction of the various turns of the bandage with arrow-heads, and each turn is properly numbered; this renders the book a self-instructor to the reader of it, who has but to put the various bandages about the limbs of an office companion a few times, when the "trick" of its application upon a patient has been learned. It takes the place, in this way, of hospital drill. Besides the "Roller Bandages," the various *Ts* "Cravats," "Slings," "Tailed," "Adhesive" and "Plaster" bandages and "Immovable Dressings" are given. The book is divided into sections treating of "The Bandages of the Head," of "The Body," of "The Upper Extremity," of "The Lower Extremity," "Knots," "Strappings," "Compresses" and "Poultices," with full description of making and

applying the same. There is an illustration for nearly every bandage described. It has been recommended as a text-book in various medical colleges and hospitals in this country, and has had two editions sold abroad. A medical student could profitably spend his vacation evenings in mastering the application of bandages by using this book as a guide, and to a practitioner it would not come amiss.

Laboratory Guide for the Bacteriologist. By Langdon Frothingham, M.D.V., Assistant in Bacteriology and Veterinary Science, Sheffield Scientific School, Yale University. Illustrated. W. B. Saunders. Philadelphia, 1895. Price 75 cents.

In four chapters the author outlines a scheme which will prove of great service to laboratory workers. In the first chapter he discusses Bacteriological Technique; in the second Staining Methods, of which he describes no less than sixteen; in the third Preparation of Nutrient Media; and in the fourth Imbedding Tissues for Cutting Sections. Many practical hints are given in the first chapter which will save the inexperienced much time and worry. Alternate pages are left blank for notes.

Notes on the Newer Remedies,

Their Therapeutic Applications and Modes of Administration. By David Cerna, M.D., Ph.D., Demonstrator of Physiology and Lecturer on the History of Medicine in the Medical Department of the University of Texas, etc., etc. Second Edition. Enlarged and Revised. W. B. Saunders, Philadelphia. 1894. Price \$1.25.

The first edition of this little volume made its appearance something more than two years since, and it will be remembered that it received favorable notice in the pages of this JOURNAL. Just at this time a space of two years sees many additions to the list of new

remedies, and though the large majority of these are intended to bring reputation and notoriety to the inventor or discoverer, rather than amelioration from suffering to sick humanity, it is well that physicians be acquainted with these preparations, and be able to take advantage of the few that do prove useful. In this volume Dr. Cerna has brought his work up to date, or as nearly so as could be expected, and has incorporated the most recent physiologic and therapeutic data in regard to these remedies. An index of diseases has also been added, which will prove useful.

Abstracts.

CHANGES IN AN ENLARGED PROSTATE EIGHTEEN DAYS AFTER CASTRATION.—Griffiths (*Brit. Med. Jour.*) has had an opportunity of studying the effects of double castration upon the hypertrophied prostate, by the death of a patient from gangrene of one leg eighteen days after the operation was done. The patient was a man aged 74, who had cystitis for many months. The prostate, examined per rectum, was about the size of an ordinary orange. Micturition was very frequent and very painful, only a few drops being expelled at a time. During the second week after operation he was able to empty the bladder fairly well. Examination of the prostate showed the following changes: (1) Proliferation of the columnar cells lining the glandular tubules; (2) acute fatty degeneration of the cells thus accumulated in the lumen of the tubules, with their disintegration and ultimate

disappearance; (3) contraction of the tubules after a conversion of their naturally tall and slender columnar cells into low cubical or almost flattened small cells; and (4) in the stroma, proliferation of connective tissue and unstriated muscle-fibre cells. It appeared that in parts many of the newly-formed cells in the connective tissue had disappeared or been converted into fibrous stroma in which there were no muscle-fibres or only traces of them. In those parts of the stroma where the changes had taken place quickly the newly-formed cells were swollen and filled with fine granules of fat.

If a comparison be made between the structure of this enlarged prostate eighteen days after bilateral castration and that of an ordinary enlarged gland from a man whose testicles had not been removed or not destroyed by disease, it will be seen that the glan-

dular tubules and the intertubular connective tissue, with its unstriped muscle-fibres, have undergone definite structural changes. In the tubules the epithelial cells had undergone, first, proliferation so as to form new cells; secondly, well-marked fatty degeneration; and lastly, disintegration followed by their complete disappearance. In this manner the tubules had, in the majority of instances, become greatly reduced in size. In the intertubular connective tissue similar changes had taken place, namely, proliferation of the connective tissue cells, fatty degeneration of the new cells, their disintegration and ultimate disappearance. In like manner the unstriped muscle-fibre cells had undergone proliferation, and the new cells thus formed were indistinguishable from the connective tissue cells among which they lie. In short, the cell elements first proliferate, then degenerate and ultimately disappear, leaving a comparatively small amount of fibrous connective tissue in their place.

But in the ordinary enlarged prostate gland the structural changes above described as occurring after castration, so far as I have been able to observe, do not take place. There is no general proliferation of the epithelial cells lining the glandular tubules, or of the cells in the intertubular connective tissue; and no fatty degeneration of the cells followed by disintegration and ultimate disappearance. In the enlarged gland there is, however, usually a tendency, in small patches here and there in the substance of the gland tubules, to the disappearance of the muscular fibres in the stroma, and to the formation of fibrous connective tissue, and this may in some instances

extend through the substance of the gland.

The inference, therefore, from the case I have related is that these structural changes in the enlarged prostate eighteen days after bilateral castration are preliminary to the ultimate atrophy of the glandular tubules and to the conversion of the prostate into a small, firm and fibrous mass, containing only remnants of the tubules, and but few traces of its muscular fibres.

TECHNIQUE OF USING ANTITOXINE.—Chaffee (*N. Y. Med. Jour.*) gives the following points in the administration of antitoxine: First of all is the selection of a reliable preparation. Next, a suitable instrument, which is a mammoth hypodermic syringe. A very good one is made by George Ermold, No. 312 East Twenty-second Street, New York. An ordinary hypodermic syringe is of no use whatever. The Ermold Antitoxine Syringe holds ten cubic centimetres, one ordinary dose of "No. 2 curative." Repeat this dose in from ten to twenty-four hours, according to the severity of the case. From one to three cubic centimetres of No. 1 will protect. The administration of antitoxine is simply hypodermic medication on a very large scale. The serum being aseptic, the same precautions and general laws of antisepsis must be observed as in making any operation. If the operation is not conducted with proper regard for asepsis, trouble will follow, and the reputation of the remedy will be made to suffer by careless operators. The syringe should be taken apart, and, with the needle, sterilized by boiling for five minutes in a solution of bicarbonate of sodium. If the cap

on the needle end of the syringe can be unscrewed, the cylinder may be filled by pouring the serum directly from the bottle. If this cap cannot be unscrewed, I sterilize a china egg-cup, into which I pour the serum for filling the syringe. The inside of the egg-cup runs to a point and none of the serum is wasted. After the instrument and cup are sterilized, I fold them in a fresh napkin or towel and place them in my instrument bag, ready to be taken to the patient's home. The locality selected as the site of medication is either between the shoulder-blades, on the breast, on the thigh or on the gluteal region. On account of the large amount to be injected a place is selected over which the skin is quite free. The skin over the point selected should be cleansed with brush, soap and water, and after this a solution of bichloride or permanganate of potassium. The size of the needle used and the amount of serum injected—ten cubic centimetres—make a local anæsthetic quite necessary, especially with timid children. For many reasons I should object to the use of cocaine for this purpose. As an anæsthetic I use a small piece of ice, with only one layer of napkin between it and the skin, held on the site of medication for about two minutes only. Upon its removal pour over the site a little more of the bichloride or potash solution, cold; pick up a fold of the skin at once, and pass the needle well in for about an inch and inject very slowly. When the needle is removed, apply the tip of the finger for a minute; next apply cotton and collodium dressing to seal the puncture. The collodium dressing should be allowed to remain for two or three days, when it

may be removed and a dressing of vaseline and cotton applied. Slight discoloration of the skin over a spot about an inch across will be found.

TREATMENT OF VARICOCELE.—Wallis (*Int. Med. Mag.*) discusses the operative treatment of varicocele. At St. Bartholomew's Hospital during five years there were 107 operations for this condition, 48, or 44.85 per cent., being done by the subcutaneous method with a percentage of 93.75 non-septic recoveries. Of the 59 cases done by the open method there was suppuration, mostly slight, certainly, in 37.28 per cent. The details of the subcutaneous operation are as follows: The scrotum and pubes are shaved and well washed with soap and water the day before the operation and again the morning of the operation—at all events a few hours before—when a scrubbing-brush may with advantage be used. Ether is then brushed over the parts and a towel wrung out in one to one-thousand solution of perchloride of mercury is bandaged over the prepared skin. A saline purge is given the morning of the operation, and, if necessary, castor oil may be given over-night as well. At the operation the cord is grasped just below the external ring with the upper hand and about three-quarters of an inch below with the lower hand; the vas deferens is then separated and kept back and the veins are held in front; it can be quite readily ascertained by the finger and thumb, when placed on opposite sides of the scrotum, that nothing intervenes between the apposed layers of skin, so that any risk of perforating a vein may be minimized.

The cord is then handed over to an

assistant, who should always be asked whether he is absolutely sure that the vas is behind his thumbs. The operator then takes a curved needle, threaded with silkworm gut, and passes it through both layers of the scrotum between the vas and the veins; the ligature is held and the needle withdrawn. Another ligature is passed in a similar manner about three-quarters of an inch below this.

Now the assistant lets the veins slip through his fingers and merely holds the skin. The operator changes the sharp-pointed needle for a blunt-ended aneurism-needle, which, unarmed, is passed through the perineal puncture *over* the veins, i. e., between the veins and the skin, and then cut through the distal puncture; the aneurism-needle is then threaded with the end of the ligature, which was passed in *below* the veins and withdrawn with the ligature. The same manœuvre is carried out with the other ligature. Now the mass of veins *encircled* by the ligatures, which are tied very tightly, the lower one *first*; the ends are cut quite close to the knot and the skin pulled up over the knots, which disappear into the scrotum and the operation is finished.

Collodion pasted over a double layer of blue gauze is applied to the punctures, a small piece of blue wool is placed over the gauze and a T-bandage completes the dressing. He emphasized the point of tying the lower knot first, as it prevents the accumulation of blood in the included portion of the veins, which necessarily occurs if the higher ligature be first tied. The advantages claimed for this operation are (1) the short time it takes; (2) the absence of all blood-extravasation,

with its attendant evils; (3) the complete safety in careful and skilled hands; (4) the excellent results which are obtained. It is generally not necessary to anæsthetize the patient; the operation can be done under cocaine. If the precautions mentioned above are thoroughly carried out, especially that of feeling the two scrotal surfaces in apposition, with no veins intervening, the operation is a perfectly safe one.

Great care should be taken in the preparation of the ligatures, which should be boiled for half an hour and then kept in either perchloride solution one to five hundred, or in one to twenty carbolic lotion.

The only case of subcutaneous ligature for varicocele which went at all wrong in my own practice was where a silk ligature was used which had been insufficiently boiled; some slight suppuration occurred subcutaneously, although in the event the patient did very well.

Another point in the after-treatment is to insist that the patient shall keep in bed for at least seventeen days. There is occasionally some difficulty in making patients understand this necessity, as they feel so well after the first two or three days.

The details of preparation in the open operation are precisely similar to those which have already been described in the subcutaneous method. These having been carefully carried out, an incision two inches in length is made through the skin, beginning immediately above the external ring and carried downward; this should go as deep as the sheath round the veins, and before this is opened it is very essential that all bleeding should be stopped, or

else immediately the fascia is cut through, the blood is soaked up by the loose areolar tissue found underneath the fascia, and this has a material effect on the after-success of the operation. When the hemorrhage has been stopped the sheath is opened and the veins just below the ring will bulge out. These veins are now separated from the vas and an aneurism-needle passed beneath them, armed with moderately stout silk. Another ligature is passed in a similar manner, at a distance between three-fourths and one and a half inches below the first, according to the amount it is thought necessary to shorten the cord.

The lower ligature is tied first, then the upper one, and the intermediate mass of veins is cut away with scissors, care being taken that at least a quarter of an inch is left in front of the ligature. Now a straight needle, threaded with quite fine silk, is passed through the quarter inch of veins mentioned above, and the ligature is drawn tight enough to approximate closely the cut ends of the veins, and thus the necessary shortening of the cord is produced without any risk of the ligature round the veins slipping, and so causing secondary hemorrhage—a risk which is a very possible one if the cord is shortened by uniting the ends of the ligatures which pass round the veins.

Drainage for the first twenty-four to forty-eight hours is advocated by some surgeons, but he is strongly disposed to regard this as not only unnecessary, but a possible source of infection and a distinct bar to primary union.

It has always been his custom to sew up the wound by a continuous sailor-stitch suture of horse-hair, taking great care that the skin edges are evenly

apposed and by putting in many stitches.

Before closing the wound it should be swabbed out with one to twenty carbolic lotion, which should immediately be taken up by a dry sponge passed round the wound. The strong lotion has an immediate bleaching effect upon the tissues, while he has never seen any harm come from it.

When the skin wound is closed the line of incision is brushed over with absolute alcohol, and then a two-fold strip of blue gauze is pasted on with collodion, a firm pad of blue wool is fixed over the wound with a T-bandage, and the operation is complete.

Unless there is some special reason, the wound should not be dressed for a week, and the stitches should be removed on the ninth day. The patient should not be allowed to walk until the seventeenth day. The success of these operations depends upon the strict carrying out of details.

IS THE APPPOSITION OF PERITONEUM TO PERITONEUM A SURGICAL ERROR? —(*Brit. Med. Jour.*, January 5, 1895.) By J. Greig Smith, M.B., of Bristol, England. During the past two years Smith has deliberately and intentionally, where possible, acted as if it were wrong to approximate peritoneum with peritoneum, and the result of his experience has been to convince him that for all purposes where sound, speedy, permanent union is desired, the apposition of two intact serous surfaces is a surgical mistake. Where the union sought need not be strong and is desired to be only temporary, seroserosal apposition may be adopted. As intestinal evacuation and drainage in obstruction was introduced by this author,

he has become responsible for the healing of a considerable number of cases of intestinal fistula and artificial anus. This is managed by an extra-peritoneal operation, made possible by detaching the parietal peritoneum for some distance around the fistula. The parietal peritoneum, still adherent to gut, being detached, the bowel, with the peritoneum, can easily be delivered through an incision traversing the cutaneous and muscular layers, and the opening, large or small in the gut, is closed by apposition of raw surfaces. Sero-fibrous apposition, or apposition of a peritoneal surface on the raw wound, is carried out in such operations as gastrostomy, hysteropexy, enterostomy, colostomy, cholecystostomy and the numerous operations which involve the drainage of cysts and abscesses. The author believes that the same rule would probably hold good with regard to intestinal surgery.—*Int. Med. Magazine.*

TREATMENT OF THE BURNED.—(Dial, *Louisville Med. Monthly.*) When called to see a burnt patient, go prepared to treat the patient as well as the burn. If the burn is at all extensive, you will probably have psychical and physical shock to treat, and little can be done for the immediate relief of pain by local applications. See that the clothing is not burning; wrap patient in a blanket and give opium in large doses for the double purpose of relieving pain and vaso-motor paresis. Stimulate, if necessary. Do not examine the wound until after reaction. Nothing is lost by waiting; on the contrary, time has given the patient, friends and probably the physician, an opportunity to get over the excitement

that is always occasioned by a person afire. Cut the clothing away; where it is stuck fast to the surface leave it after trimming away the margins. Leave the blisters to spontaneous rupture beneath the dressing; the serum is aseptic, if not antiseptic, and after drying forms, in some cases, a natural protective. At no time during the treatment allow lint or cotton to come in contact with the denuded surface. Absorbent cotton spread very thin between two layers of gauze and saturated with

℞.—Carbolic acid, - - 3 iv
Olive oil, - - -
Saturated solution
(aqueous) borax, aa 3 viij
M. Shake well.

Envelope the burnt surface, and over this spread a layer of cotton batting, which is slow to absorb and prevents evaporation; finish with a roller bandage. Leave this dressing until the third day, when it is to be removed. Then irrigate the burn from one-half to one hour with a "hot as can be borne" antiseptic solution. Dry thoroughly with baked cloths and apply

℞.—Carbolic acid, - - - 3 ss
Boric acid, - - - 3 j
Bismuth subnit, - - 3 ij
Petrolatum, q. s., - - 3 j

M.—Spread on linen, finish as in primary dressing.

This dressing is to be renewed daily. Continue the hot wash until all the sloughs separate, then discard it.

Never apply a dry powder to a burn; an ointment is more grateful to the patient and results the same. Don't apply cocaine to a burn. As a prognostic pointer I will say the pregnant will abort, the tuberculous will die and the babe will recover.—*The College and Clinical Record.*

A NEW OPERATION FOR GLAUCOMA.
—George L. Walker, F.R.C.S., of Liverpool, presented a paper to the International Congress of Ophthalmology, held in Edinburgh last summer, in which he described a new operation for chronic glaucoma.

He states the well-known fact that iridectomies are of doubtful utility in this disease, and he has long since abandoned them. He believes that the earlier successes that followed iridectomy were due to the cystoid cicatrices that often followed the operation, which were lamented by the surgeon. Mr. Walker's operation makes a fistula in the cornea, and is thus described in his own words:

"After cocainizing the globe, I snip with scissors, just behind the uppermost part of the cornea, a flap of conjunctiva about 1-16 inch wide by 3-16 inch long; turn this back, and then fixing the globe with forceps, I thrust through the sclero-corneal margin, close to the base of the flap, a narrow hinge, making an incision perpendicular to the plane of the iris, large enough to take in the flap. Then I withdraw the knife, letting out the aqueous; when it has ceased to flow, I push the flap into the anterior chamber through the incision, and leave it there. An old worn-out canaliculus knife does this very well, and also serves for the subsequent probing which the fistula requires.

"The eye is bound up for twenty-four hours and then inspected. If the flap be found to have remained in the incision, the lids should be again closed for a short time, until it be thought advisable to expose the eye. Sometimes, owing to the incision having been made too large for the flap, the

latter may be washed out, in which case it will have to be replaced, perhaps, several times, before it will be permanently retained."

The raw surface of the flap unites to the adjacent edge of the corneal incision, and as the epithelial surface of the conjunctiva will not unite with the edge of the cornea, a fistula is made into the anterior chamber. This fistula needs probing.

He says he has kept eyes alive for the last four years that would otherwise have been lost. He claims that if it does not cure these cases it will at least retard the progress of the disease indefinitely.—*Times and Register*.

In the treatment of cystitis in the female, Dr. Talier urges the importance of frequent and copious irrigations. The apparatus used for this purpose consists of a funnel of three-ounce capacity to which is attached a small-sized soft rubber catheter. The meatus should be cleansed, the catheter introduced, the funnel lowered and the bladder allowed to empty itself. The funnel is then elevated and the irrigating fluid poured in until the bladder is filled. By a repetition of emptying and filling the irrigation is carried out. Only three or four ounces of solution should be introduced at one time. In acute cystitis, attended with considerable pain and tenesmus, a solution of boric acid (ten grains to the pint), at a temperature of 100° F. should be used. In the chronic form silver nitrate is the best alterative agent. The treatment should be begun with a very dilute warm solution of this drug (1-10,000), and gradually increased until 1-1,000 or 1-500 is reached. In connection with this treatment, alkalin

diuretics are administered, water is to be used copiously, and opium and belladonna should be given as necessary to control pain and spasm.—*The Philadelphia Polyclinic*.

THE TREATMENT OF ERYSIPELAS WITH STRONG ALCOHOL.—Langsdorff (*Centralblatt für Chirurgie*, 1895, No. 8, p. 189) reports the employment of topical applications of strong alcohol in the treatment of thirty-two cases of erysipelas. Soft, thick linen compresses are saturated with the alcohol, and are renewed every fifteen or twenty minutes, being covered with dry cloth and gutta-percha tissue. If the face is affected, cotton compresses are used instead of linen, as adapting itself better to the irregularities of the surface. The compress must be saturated with alcohol, and should be frequently changed. In all cases thus treated the symptoms speedily receded. Some little discomfort was experienced from the applications when the face was involved and in the case of sensitive persons who were unpleasantly affected by the odor. The redness and tension often disappear in the course of eight or ten hours, after which the intervals of application may be lengthened. Recovery, as a rule, resulted in the course of two or three days. If the morbid process manifested a disposition to extend, the applications were made to include the new areas involved. For the dryness of the skin following the applications lanolin was found serviceable. Official absolute alcohol diluted with 1 per cent. of water was employed.—*Medical News*.

THE TREATMENT OF GONORRHOEA BY IRRIGATION OF THE URETHRA.—

(*Therapeutic Gazette*, November 15, 1894.) By H. M. Christian, M.D., of Philadelphia. The results reached in the treatment of these cases seem to warrant, according to Dr. Christian, the following conclusions:

1. That irrigation is a distinct advance in the treatment of gonorrhœa; in fact, up to a certain point it must be considered the proper treatment for that disease. It relieves *ardor urinæ* and chordee more promptly than any other form of treatment. It is attended with a much smaller proportion of complications such as total urethritis and epididymitis.

2. That permanganate of potassium is the best remedy for the purpose of urethral irrigation.

3. That irrigation alone cannot be relied upon to absolutely cure specific urethritis. For the cure of the thin muco-purulent discharge which appears at the meatus in the morning, some astringent injection used by the patient himself is necessary.

4. That simple non-infectious urethritis can be cured in from ten to twelve days by daily irrigations with permanganate of potassium. The writer is of the opinion that, where it is possible to carry out irrigation of the urethra with permanganate of potassium solution twice daily, this procedure very materially lessens the duration of the disease. The solutions used were as follows: bichloride of mercury, 1 to 15,000, increasing the second week to 1 to 8,000; nitrate of silver, 1 to 6,000, increasing to 1 to 3,000; permanganate of potassium, 1 to 4,000, increasing to 1 to 2,000; trikresol, one-half to one per cent.—*International Med. Mag.*

INSANITY AND DISEASES OF WOMEN. (*Medical Record*, August 4, 1894.) By W Gill Wylie, M.D. The author reports three cases of reflex melancholia due apparently to genital disturbances and relieved by the cure of those conditions. In the first case, that of a woman thirty-five years of age, with hereditary tendency to mental disease, the removal of a large detached subserous fibroid that had already begun to undergo calcification seemed alone to produce a complete cure. Two other cases, one of subinvolution and one of lacerated cervix, recovered after relief of those conditions. The diagnosis of reflex melancholia, probably due to genital irritation, had been made by Dr. E. C. Spitzka in these two cases. Dr. Wylie advocates consultation with a gynæcologist in cases where melancholia is unsuccessfully treated by open air, rest and other means; where there is, as in many of these patients, a strong predisposition or an hereditary unstable brain, a guarded prognosis is advisable, even with apparent recovery.—*Ibid*.

THREE CASES OF INTRACRANIAL ABSCESES; RECOVERY IN EACH CASE. (*Brit. Med. Jour.*, January 5, 1895.) By Robert W. Murray, F.R.C.S., of Liverpool. The author reports three cases of intracranial abscess with trephining, evacuation of pus, and recovery in each. The first case was caused by a punctured fracture of the skull made by the sharp end of a poker. Before operation the child had loss of power in the left hand and epileptic seizures affecting the left arm and the left side of the face. The abscess was in the motor region, at the junction of the upper and middle thirds of the

fissure of Rolando, and contained one drachm of pus. The recovery was uninterrupted, and the patient was perfectly well three and a half years after the operation. The second case was caused by middle-ear disease. Before operation there was a divergent squint in left eye, left pupil was dilated, and right-sided facial palsy and double optic neuritis were present. The abscess was situated in the temporo-sphenoidal lobe and contained three ounces of pus. Recovery was uneventful, and the patient was well one year after the operation. The third case was also due to middle-ear disease. Before operation the patient presented double optic neuritis, vomiting, severe frontal headache and sighing respiration. The abscess was situated in the cerebellum and contained six drachms of pus. Recovery was prompt, and patient's health was fully restored six months after the operation. In this case a subperiosteal abscess over the mastoid process and an extradural abscess on the sigmoid sinus were opened previously to the opening of the cerebellar abscess.—*Ibid*.

In chronic cases of obstruction of the intestines Professor Keen says the history given by the patient points to a gradually increasing stenosis of the intestines. He will give a history that it is becoming more and more difficult to procure a movement of the bowels with the usual laxatives, and then again at times he will have diarrhoea.—*Coll. and Clin. Record*.

Read this JOURNAL and mention it in your correspondence with advertisers.

Correspondence.

Editor N. C. Med. Journal :

MY DEAR DOCTOR :—The following appears over the portals of the Law and Medical Department of the old University of Bologna, in Italy:

“Dum ægrotus visitatur
Et processus ventilatur
Cura te accipere;
Nam ægroto restituto,
Et processu absoluto,
Nam curet solvere.”

Hon. M. L. Towne, of Brooklyn, N. Y., a literary lawyer, has rendered the following translation into English:

“While abed the sick man's lying,
While the client's cause you're trying,
That's the time to get your fee;
For when the patient has recovered
And the law-suit's won and smother'd,
No one then will care for thee.”

Fraternally yours,
J. W. LONG.

Richmond, Va.

Editor N. C. Med. Journal :

DEAR SIR :—W. B. Saunders, Philadelphia, has recently published a Syllabus of Gynecology by Dr. J. W. Long, Professor of Diseases of Women and Children in the Medical College of Virginia. As Dr. Long is a native

North Carolinian, your readers will doubtless be interested in this work. The Syllabus is arranged after an entirely new plan, and is the first book of the kind ever written on Gynecology. It is based upon the American Text-book of Gynecology, and is intended to be used as lecture notes by both teacher and student, also for a reference book for practitioners. It is interleaved with blank leaves, which are intended for the record of additional notes and references in journals. The work has been highly complimented by many of the leading teachers of Gynecology in America, and almost without exception they say that they will recommend the book to their classes, and many of them say they will use the book as lecture notes. All agree that it fills a long-felt want and will be of immense service to every one interested in this line of work. The plan of arrangement is such that, with constant addition of references from current gynecological literature, the entire subject is kept up to date, and the book will not soon be counted a back number.

The price, one dollar, puts it within reach of all.

J. ALLISON HODGES.
Richmond, Va.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

Official list of changes in the stations and duties of officers serving in the Medical Department U. S. Army, from March 14, 1895, to March 20, 1895:

Porter, Alex. S.—The leave of absence, or surgeon's certificate of disability, granted 1st Lieut. Alexander S. Porter, Assistant Surgeon, is extended four months, on surgeon's certificate of disability.

Harvey, Philip F.—The leave of absence for seven days, granted Major Philip F. Harvey, Assistant Surgeon, is extended twenty-one days.

Heizman, Chas. L.—Leave of absence for one month, to take effect about March 10, 1895, is granted Maj. Chas. L. Heizman, Surgeon U. S. Army, Fort Douglas, Utah.

Clendening, Paul.—The leave of absence for seven days granted Captain Paul Clendening, Assistant Surgeon, is extended twenty-one days.

The attending Surgeon at Boston, Mass., will attend the sick at Fort Warren, Mass., during the absence of Capt. Clendening.

DeShon, Geo. D.—1st Lieut. George D. DeShon, Assistant Surgeon, is relieved from duty at Fort Logan, Colorado, and ordered to duty at Fort Douglas, Utah.

Walker, Freeman V., Assistant Surgeon, is granted leave of absence for one month, to take effect upon his relief from duty at Fort Trumbull, Connecticut.

THE NAVY.

Two weeks ending March 23, 1895: *Bradley, Michael*, Medical Director, ordered before Retiring Board March 20, 1895.

Hesler, F. A., P. A. Surgeon, ordered to the U. S. S. "Philadelphia."

Crandall, R. P., P. A. Surgeon, detached from the U. S. S. "Philadelphia," ordered home and granted three months leave of absence.

Young, L. L., Assistant Surgeon, detached from the Naval Hospital, Norfolk, Va., and wait orders.

Farenholt Ammen, Assistant Surgeon, ordered to the U. S. S. "Baltimore."

MARINE HOSPITAL SERVICE.

Changes in the Medical Corps of the United States Navy for the fifteen days ending March 15, 1895:

Godfrey, John, Surgeon, detailed as Chairman Board for physical examination of candidates Revenue Cutter Service, March 6, 1895.

Fairfax, Irwin, Surgeon, to inspect Cape Charles Quarantine Station, March 9, 1895.

Mead, F. W., Surgeon, detailed as Chairman Board for physical examination of candidates Revenue Cutter Service, March 6, 1895.

A. H. Glennan, P. A. Surgeon, to report at Bureau for special temporary duty, March 12, 1895.

Gardener, C. H., Assistant Surgeon, to proceed to Angel Island Quarantine Station for temporary duty, March 4, 1895. Detailed as Recorder Board for physical examination of candidates Revenue Cutter Service, March 6, 1895.

Stewart, W. J. S., Assistant Surgeon, detailed as Recorder Board for physical examination of candidates Revenue Cutter Service, March 6, 1895.

Oakley, J. H., Assistant Surgeon, detailed for duty on Revenue Steamer "Rush," March 13, 1895.

Cumming, H. S., Assistant Surgeon, to proceed to Boston, Mass., for temporary duty, March 6, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

We acknowledge the receipt, from Messrs. Frederick Stearns & Co., Detroit, Mich., of a neat and useful desk blotter and calendar combined.

The Annual Meeting of the American Medical Publishers' Association will be held in Baltimore, May 6th, convening in the parlors of the Eutaw

House, at 9:30 a. m. An interesting program is being prepared.

Location, or partnership with an old physician wanted, in village or small town (1,000 to 3,500 inhabitants), preferably in middle or eastern section of the State. Three years experience. Address W., Box 106, Salisbury, N. C.

Vassali (*Gazetta Med. Ital. Lomb.*) reports a case of sextuplets, which is said by Herf to be the first well-authenticated case on record. On the one hundred and fifteenth day of pregnancy, the abdomen being as large as in ordinary pregnancy at full term, the woman was taken in labor. One fetus was delivered by a midwife and Vassali delivered five others. They were all born alive, had separate amniotic sacs and a single placenta. The mother made a good recovery and was delivered of healthy twins the following year.

The New York Health Board has been authorized by the Legislature of that State to sell antitoxine, and will now place what is not needed in its own hospitals and in public institutions or for the treatment of the poor of New York city on sale in phials of three sizes at the following rates: No. 1, containing 600 antitoxine normal units, \$1.25; No. 2, containing 1,000 units, \$2.50; No. 3, containing 1,500 units, \$4.00.

Dr. William S. W. Ruschenberger, aged 88 years, died at his residence, in Philadelphia, March 25th. In 1826 he entered the medical service of the United States Navy and steadily advanced until when he retired, in 1869, he was senior officer in the medical

corps. In 1871 he was commissioned Medical Director on the retired list, with the relative rank of Commodore. He served in all parts of the world, and was a voluminous writer on scientific subjects. Dr. Ruschenberger was one of the founders of the Academy of Natural Sciences, and a member of the Historical Society of Pennsylvania, the American Philosophical Society, the American Medical Association and the College of Physicians of Philadelphia, of which he had been Secretary and Vice-President.

FUN AMONG THE POETS. — Some years since, David Barker, a distinguished poet in the State of Maine, after the birth of his first child, wrote and published the pretty poem:

One night as old St. Peter slept,
He left the door of Heaven ajar,
When through a little angel crept,
And came down with a falling star.

One summer, as the blessed beams
Of morn approached, my blushing
bride
Awakened from some pleasing dreams,
And found that angel by her side.

God grant but this—I ask no more—
That when he leaves this world of
pain,
He'll wing his way to that bright shore,
And find the road to Heaven again.

John G. Saxe, not to be outdone, and deeming that injustice had been done St. Peter, wrote the following as St. Peter's reply:

Full eighteen hundred years or more
I've kept my gates securely fast;
There has no "little angel" strayed
Nor recreant through the portal
passed.

I did not sleep, as you supposed,
 Nor left the door of Heaven ajar;
 Nor has a "little angel" left
 And gone down with a falling star.

Now, ask that blushing bride and see
 If she don't frankly own and say,
 That when she found that little babe
 She found it in the good old way!

God grant but this—I ask no more—
 That should your number still en-
 large,

You will not do as done before,
 And lay it to old Peter's charge.

To settle the dispute between the
 above authors, Judge J. W. Starr
 writes and sends the following:

I read of David Barker's babe,
 And Heaven's door ajar,
 And how it came from glory land
 Down with a falling star.

'Tis said St. Peter gave the babe;
 Saxe doubts the bold assertion,
 And calls upon the blushing bride
 To make a different version.

Twixed David Barker and his bride
 This is a sacred cause;
 They know just how the baby came,
 It came by natural laws.

Saxe writes of lovely summer morn,
 He writes of other things,
 He writes about the good old way,
 New life within him springs.

God grant but this—I ask no more—
 May father, son and bride
 Join St. Peter in the end,
 And John G. Saxe beside.

DIPHTHERIA IN LONDON AND NEW YORK.—During the last week in January there were 29 deaths from diphtheria in London, a progressive fall having taken place from 50 deaths in the week ending January 5th. The close correspondence in time with the report given in the last number of the *Journal* of a falling off of 25 per cent. in the cases of diphtheria in New York City during the same period is extremely interesting. If, as is thought by the health officers of New York, the abatement in that city is due to the use of antitoxin, may not the decrease in London be due to the same cause? It is also noteworthy that in Paris, between January 20th and 26th, there were but 7 deaths from diphtheria, the average for past years being 33.—*New York Medical Journal*.

The death of M. Dujardin-Beaumetz, the well-known Paris clinician, is announced as having taken place on February 15th. He was in his sixty-first year.

Your subscription to the *JOURNAL* is solicited.

Reading Notices.

Pepsin is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, *provided a good article is used*. ROBINSON'S LIME JUICE and PEPSIN and AROM. FLUID PEPSIN (see

page 15, this number) we can recommend as possessing merit of high order. The fact that the manufacturers of these palatable preparations use the purest and best Pepsin, and that

every lot made by them is carefully *tested*, before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

LACTOPHENIN.—Strauss (*Therapeutique Monatshefte*, September, 1894) reports his experiments with lactophenin as an antipyretic. In seven cases of typhoid fever in which he administered the drug, while the sedative effects were not so constantly observed as in von Jaksch's cases, it never gave rise to unpleasant symptoms. The dose was 7 to 15 grains, and never exceeded 45 grains a day. The antipyretic action of the drug was pronounced. The writer regards lactophenin as a good substitute for perfect hydro-therapy.

In four out of five cases of facial erysipelas it lowered the temperature; in the remaining case other antipyretics also failed.

In two cases of diphtheria (one septic) the temperature fell nearly 2° C. within five hours.

In three cases of pneumonia its antipyretic action was noticeable.

In one or two cases of scarlet fever it failed to act.

In five cases of phthisis it lowered the temperature and caused profuse diaphoresis, but produced no unpleasant effects.

In one or two instances its use was accompanied with a diffuse rash.—*Univ. Ned. Mag.*

ONE HUNDRED POINTS OF PERFECTION.—It is only a few years since the Pabst Brewing Company's malt extract was first placed on the market. It was introduced as the "Best" Tonic, and through its excellence soon became a general favorite. At the great Columbian Exposition at Chicago, the Pabst Malt Extract was examined by the Government Chemist and the Board of Judges, and the result was the highest flattery that could be bestowed. Of all the host of malt productions they examined, coming both from this

country and from Europe, the "Best" Tonic was selected as the only one thought worthy of the highest rank. It was marked with the 100 points of perfection. Such a distinction has never been conferred in the history of expositions. It recognized the Pabst Malt Extract as the head of scientific malt foods and in advance of the highest previous attainments in the production of malt extracts.

BUFFALO LITHIA WATER IN BRIGHT'S DISEASE OF THE KIDNEYS, URIC ACID DIATHESIS, etc., etc.—Extract from "Report on Therapeutics and Practice of Medicine," by E. C. Laird, M.D., Haw River, N. C., read before the Medical Society of the State of North Carolina, May, 1894.

"During the last season (as resident physician at the Springs) your reporter used the Buffalo Lithia Waters Nos. 1 and 2 extensively in almost every form and stage of acute and chronic Bright's Disease of the Kidneys and Diabetes with most gratifying results. This action of these Waters cannot be attributed to the effect of the large quantity of pure water passed through the system as suggested by some writers, for in many instances the beneficial effects produced by one spring would be greatly enhanced by change to the other, and *vice versa*, showing some special curative action of each water in the individual case.

"This I attribute to two well-established effects of these Waters, first, their powerful solvent and eliminating action on Uric Acid, which is considered by Tyson and others the principal excitant of Bright's Disease, and secondly, to their nerve tonic properties, thus embracing the wide range of adaptability to the cause of trouble, whether commencing with 'mind-strain' from over-work, worry or sorrow, as suggested by Drs. Thorn, Howard and Flint in the 'Virginia Medical Monthly, May, 1894,' or to one or more of the diatheses, either Gouty, Rheumatic, Phosphatic, Oxalic, Lithæmic or Diabetic."

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, APRIL 20, 1895.

No. 8.

Original Communications.

PLACENTA PRÆVIA.*

By P. GUNTERMANN, M.D., Louisville, Ky.

In the year 1730, Giffart, a French accoucheur, first directed attention to placenta prævia as a cause of unavoidable hemorrhage in labor. This observation was soon confirmed by Heister, Levret and others. To-day it is a fact. Placenta Prævia is said to occur about once in five hundred or seven hundred and thirty-three pregnancies.

It has been my misfortune—perhaps good luck—in a practice extending over twenty-six years to see over seven cases of placenta prævia. In three of the cases I was called in as consultant, and four of the cases were my patrons. Of the first three two died, the third recovered, but was confined a long time to her bed with the most terrific metritis I have ever seen. All of the three children died—one undelivered.

*Read before the Louisville (Ky.) Clinical Society.

My four cases fared better. The mothers made a happy and perfect recovery; also two of the children lived. Two were extracted asphyxiated. The death of the two mothers and their babies, also the protracted illness of the third of the first series, I am sorry to say, must be attributed to inexcusable delay. My own cases were delivered promptly and with judicious expedition. It may seem egotistic, yet the result tallies with the best of modern times and treatment.

The mortality of the mothers has decreased from 40 per cent. to 10 per cent.; the death-rate of the children is from 50 per cent. to 75 per cent., and of those born alive more than one-half die within a week or two. The mother dies from loss of blood in collapse, the child, for the want of air, asphyxiated.

Cause.—Since placenta prævia is mostly found in multipara and in women who have suffered with lecorrhœa, it is supposed that a large uterine cavity, with a smooth surface, deprived of its fold and epithelium, has much to do with the aberration. Recently it has been broached, and the theory is plausible, that the impregnated ovum had become detached from its usual seat, one of the cornu of the uterus, and, instead of being lost or absorbed, had lodged near the internal os and there developed.

The placenta may be placed central or lateral. In *placenta centralis* hemorrhage is of necessity larger and more dangerous than in *placenta lateralis*; in the latter instance a woman may go on to full term and even be delivered without the loss of more blood than ordinary. The cause of the hemorrhage is due to rupture of the blood-vessels, and comes mostly from the placental vessels. We have seldom hemorrhages from placenta prævia during the first six months of gestation, nearly always during the last three months, certainly, at the onset and progress of labor. The reason for this, we are taught, is that during the first two-thirds of pregnancy the upper two-thirds of the uterus enlarge, and in the last three months the fibres of the lower segment multiply and grow rapidly. Now, also, the placenta has fully developed within the first six months, and, if placed in the lower segment over or at the side of the os internum, as the inferior third of the uterus begins to enlarge and expand it (the placenta) remains passive, does not, at least, grow in proportion to the uterine structure. The necessary con-

sequence is detachment, rupture of vessels and bleeding.

Diagnosis.—Sudden, free and unaccounted-for hemorrhage from the vagina in a pregnant woman is the first and almost positive diagnostic sign of placenta prævia. Palpation reveals an unusually globular uterus, it is not pyriform, or even ovular. The child may be readily felt through the thin walls at the fundus. On auscultation we detect the placental bruit over the hypogastric region. The os and cervical region has a peculiar boggy feel. When the os is open, the placenta central, an educated finger will at once detect the placental structure, and, when lateral, the membranes are abnormally thick and lead to the placental margin.

Prognosis.—As may be inferred from the preceding the prognosis is very grave.

From 10 per cent. to 40 per cent. of the mothers die. When the mother does not perish she is liable to be an invalid for a long and indefinite time; she is exceedingly prone to septic infection. The death-rate of the children is simply appalling. Statistics give it as from 50 per cent. to 75 per cent.

Treatment.—In the early period of pregnancy all hemorrhage from the vagina must be treated on the expectant plan, the more so if we are not quite certain as to their cause. We enjoin rest, absolute quiet of body and mind and the recumbent posture. In the latter months, with the os still indurated and enlarged, the same rule holds good—supplementary we may insert a tampon. A good cotton or charpie tampon is preferable to a C. Braun's colpeurynter or any other

artificial contrivance. The tampon will check hemorrhage, at least in a measure, and superinduce labor pains.

As soon as the os softens and opens to allow the passage of a finger, commence to dilate gradually, but surely. When dilatation has sufficiently progressed—this to be determined by the operator—turn by the bimanual or Braxton Hicks method, detach the placenta and pull one or both of the lower limbs down. Here we have a tampon the size of which may be increased by slowly pulling the limb or limbs. Detach the placenta on the side where it has the least volume, if central, detach on the side where the feet of the baby are felt. It is perhaps never advisable or safe to pass directly through a central placenta, because:

1. We necessarily tear large blood-vessels and may cause fatal hemorrhage.

2. It is by no means easy to go through such a large fleshy mass and a separation of a more or less large area of placenta from the uterine walls is unavoidable.

3. The central opening may be too small to allow the speedy passage of the child's body, or, if it does, it may disturb the proper position of the limbs or distend the head, making delivery tedious and enhance the danger from prolonged hemorrhage. Sometimes it may be well to rupture the membranes. The contracting uterus closes the sinuses, forces the body, or, more desirable, the head of the child against and upon the bleeding surface, and thus the hemorrhage is checked. This, however, is a dangerous procedure and may become the cause of fatal concealed hemorrhage.

The bleeding may cease spontaneously. When the child is dead the blood frequently coagulates in the sinuses and seals the bleeding vessels.

Dilatation is often accomplished by artificial means. Never use a sponge tent, it increases the danger of septic infection. Barnes' dilators are universally used. They ought to be inflated with air or water. Air is the only agent that will dilate them to their fullest extent; water oftentimes bursts them. These dilators act also the part of a tampon.

An *accouchement force* is not devoid of peril, yea it is at times disastrous. Should the neck not be fully obliterated, softened and dilatable, extensive lacerations are almost unavoidable, and from them abundant hemorrhages flow.

Our guide for rapid or slow delivery must be the condition of the child. If the child is dead, we can temporize; on the other hand, if it is alive, it is our duty to save it by quick and forcible extraction. Turn or use the forceps, as the case may be, and do it promptly.

Altogether, each case must be treated on its own merits, and the management must be left to the discretion and ability of the attendant.

Medicines are of little value. Quinine is an excellent oxytocic and uterine tonic; so is strychnine, which is also one of our best cardiac stimulants. Injections of whiskey or ether may be called for to sustain the ebbing life until the crisis is passed. Astringents are useless. The utility of ergot—preferably given hypodermatically—is questionable; so are local applications; yet ergot, hot and cold applications, either singly or com-

bined, and astringents may have a large share in the treatment. On this we will not now dilate.

The rule in the management of placenta prævia should be: Safety to the mother first and then to the child.

ACETANILID VS. QUININE TO ABORT CHILLS AND FEVER; AND ACETANILID AS A DUSTING POWDER.*

BY BENJAMIN H. BRODNAX, M.D., of Brodnax, La.

In 1890 I first used acetanilid in a case of catarrhal fever with convulsions, in an infant nine months old, with astonishing amelioration of all grave symptoms in fifteen minutes. My next trial of the drug was in intermittent fever in a family of three small children. The doses ranged from two to three grains, and when the time for the chills arrived the children were asleep and perspiring. I have employed the drug quite extensively, but it is especially in chills and fever that I desire to emphasize its great merit. My mode of using it is as follows:

If there is time before the chill, I give from one and a half to two grains of calomel in quarter-grain doses a half hour apart. Then, whether the bowels have acted or not, I give, according to the age, from two to six grains of acetanilid twenty minutes or half an hour before the expected chill. Gentle perspiration, with sweet and natural sleep, usually promptly follow the administration of the drug, from which the patient awakens entirely relieved and ready to go about in half an hour.

When there is not time before the chill to administer the calomel, it may

be deferred until afterward; but the acetanilid may be given immediately before or during any stage of the chill or fever, with the happy result of promptly inducing sleep and gentle perspiration. Should the desired effect of the drug, namely, sleep and perspiration—not follow its administration within a half hour, a second dose of equal amount should be given.

The after-treatment consists of an acid tonic, namely:

R.—Acidi. nitro. muriatici
dil. — — — — f ℥ j

Ferri sulphatis, — — gr. lxxx

M.—This should stand for twenty-four hours. S.—Ten drops in water three or four times a day.

On Friday, October 19th, I was called to see a young man who had had “dumb” chills, with vomiting and severe gastric disturbances, for six days, the attack coming on daily at 1 o'clock and lasting until midnight. When I arrived, at 7 o'clock in the evening, he was vomiting thick, glairy mucus, and was unable to retain anything on his stomach. I immediately administered, hypodermatically, one-quarter of a grain of morphine and gave six grains of acetanilid dry upon the tongue. He had one slight attack of vomiting soon after, but a little later fell into a sweet and a refreshing

*Read before the Morehouse County (La.) Medical Society, February 13, 1895, by Dr. Oscar H. Allis.

sleep, from which he did not waken until 7 o'clock the next morning. As the next chill was expected at 1 o'clock, he was ordered to take six grains of acetanilid twenty minutes before. No chill followed and none have taken place since. The after-treatment with the "acid tonic" was pursued, as is always my custom.

I have now treated several hundred cases of chills with acetanilid, and without quinine, and report my success in the hope that others will be induced to give it a trial.

Acetanilid and boric acid, in equal parts, as a dusting powder, I have used extensively in ulcers, burns, etc. I find the powder especially serviceable in the excoriation of infants and fleshy people; with it I dust the funis of the newborn babe, while over the vulva of the mother I place a little cotton previously well dusted with the powder. Made into a paste with glycerin, I have used it in a vaginal tampon to allay uterine pain.

In the case of a female, sixty-one years of age, almost crazed with the itching from a pustular eruption that covered the lower part of the abdomen, vulva and anus, the powder well dusted over affected parts, after first moistening the parts with dilute carbolic acid, was followed by six hours of consecutive sleep. She was awakened by a return of the itching, and, rising, washed the parts and reapplied the dilute carbolic acid and powder, with immediate return to sleep. A great improvement was observed the next day, and in a few days the parts were well. Previous to the application of the powder she had not slept well for several nights, even with the aid of morphine.

Internally I have used it to correct a foul breath; also in dysentery and diarrhœa. When taken on the tongue and held in the mouth a few moments before swallowing, it has the effect of allaying the distressing thirst that accompanies fever.

PHYTOLACCA DECANDRA FOR EPITHELIOMA.

BY E. G. GOODMAN, M.D., El Paso, N. C.

While the root and berries of the above-named plant have been largely experimented with, and have been found to possess therapeutic properties of great value, yet the green leaves of this plant possess a property which alone would entitle it to rank among the most valuable remedies of the materia medica. I refer to its power in destroying epithelioma.

The method of using the remedy is to bruise the green leaves to a pulpy mass; collect the expressed juice in a

shallow receptacle, as a plate; allow it to evaporate to a thick, pasty consistence; spread a portion of this on a piece of silk or other suitable cloth, and apply to the morbid growth.

The plaster should be removed, the part washed and a new application made twice daily. The remedy causes severe pain. It has a selective action for the morbid tissue; follows out all the irregularities of the epithelioma; causes, as it were, its liquefaction and

removal, and then acts as cicatrisant for the open sore.

As soon as all the morbid tissue is destroyed, a band of cicatricial tissue begins to spread from the periphery, and as this occurs the plaster should be cut smaller each day, so as to conform to the size and shape of the surface to be covered by it.

Under this treatment I have seen large epitheliomatous masses de-

stroyed in a few weeks and nothing but a faint scar left at the place occupied by the growth. In no case was there a recurrence at the original site.

Unlike other remedies, it can be used fearlessly; does not endanger the patient; combines within itself a caustic action and healing property, and requires to be used in the same manner from beginning to end.

Society Reports.

LOUISVILLE (KY.) CLINICAL SOCIETY.

Dr. P. Guntermann read a paper on

PLACENTA PRÆVIA.—(See page 193.)

Discussion.

Dr. Louis Frank: Dr. Guntermann has covered the ground so thoroughly that there is very little to be said. There are certain cases, while not really placenta prævia, symptoms arise like those the doctor mentioned, which may be due to the placenta being in the lower segment of the uterus and its early separation. I think the best treatment of placenta prævia would be not to delay with the tampon, but immediately, if the child is viable, to proceed to deliver by forcible dilatation—rupture the membranes bringing down the foot of the child. In this way the child acting as a tampon, of course prevents any further hemorrhage as dilatation takes place.

The mortality in placenta prævia is very great, both to mother and child,

and I think it is a question which we may consider with a great deal of propriety whether or not to induce premature labor as soon as hemorrhage became at all alarming, or frequently repeated, even though the child was not at all viable. Dr. Guntermann is certainly to be congratulated upon the results obtained in his cases.

Dr. I. N. Bloom: A year before I left college I remember the question was asked the graduating class by the Professor of Obstetrics, "*When should forceps be applied to the after-coming head?*" The class said *never*. To the best of my recollection that was the correct answer. I mention this because I heard one of the speakers say that you turn and use the forceps. I want to know whether it is the custom now-a-days to turn and use the forceps on an after-coming head?

Dr. J. W. Irwin: This is a subject in which personally I have not had very much experience. I have treated three cases of placenta prævia and seen

five all told; all three mothers recovered, but all three babies died. If I recollect correctly—these cases occurred close together and were all that I have seen during twenty odd years of practice—no case was observed before the sixth month of utero-gestation. The hemorrhages were very violent, indeed, very alarming, some of them going to the extent of almost destroying the life of the patient. The treatment which I adopted in all cases, as the hemorrhage was so alarming that I had no time to try other methods, was to produce forcible dilatation with the hand and unbuttoning, as it were in two cases, a partial, and in the third a central, implantation. In the latter case, when seen, there was a tremendous hemorrhage; the patient's room was near the head of the stairs on the second floor, and the blood, after going through the bed, streamed out of the room and I was met by it at the head of the stairs. I forced a way through the placenta, turned the child and brought down the feet. The child was dead. As soon as I could engage it in the neck of the uterus the hemorrhage ceased. I used hot water douches and allowed it to remain until firm contractions of the womb ensued. After delivering the child I used as a douche one part of cider vinegar to sixteen parts of hot water and kept up a continuous stream with a fountain syringe until all hemorrhage ceased. This method was recommended by Penrose, of Philadelphia, when he was Professor of Obstetrics in the University of Pennsylvania. Wallace also recommended similar treatment after placenta prævia and in post-partum hemorrhages where the hemorrhages were very severe.

Several years ago statistics were prepared in the State of Indiana by a Dr. King on the subject of placenta prævia, he collected all the data it was possible to obtain, which was afterward published in the proceedings of the American Medical Association. He showed that the largest number of cases of placenta prævia occurred in women during their second confinement; that primipara did not furnish nearly so many cases as multipara, and that after the second confinement the number of placenta prævia diminished.

The causes of placenta prævia are very indefinite, going back as far as the time of Tyler Smith, who said that placenta prævia was due to the fact that the ovule dropped down nearly to the internal os and there became impregnated. Cazeaux believed that the membrane on certain occasions was not so turgid or so swollen as it ought to be to prevent descent of the ovum, and therefore impregnation took place at or near the internal os, the placenta forming where impregnation took place. No matter what the case may be, it is probable that the ovum is nearly out of the womb when impregnation takes place, and whether the womb is in a normal condition or not, I think it would be a very difficult question to determine, in view of the fact that very few of these cases can be observed post-mortem at the beginning of utero-gestation. It has also been suggested that placenta prævia is often the cause of abortion in the early stages of pregnancy. I have no doubt that sometimes this occurs, although I do not remember ever to have seen a case that I could trace to this cause.

Dr. Guntermann, in his paper, makes a statement which I think would admit

of a little revision, i. e., that a rapidly enlarging uterus is the cause of the hemorrhage. That fact is not borne out, because the great majority of placenta prævia occur after the eighth month, within the last two weeks of utero-gestation. In fact, we might say that nearly all cases occur during the last three months of gestation. Now, if a rapidly enlarging uterus were the cause of the hemorrhage, the question would naturally arise, why did not hemorrhage occur before the eighth month, or before the last two weeks of utero gestation. The inference would be that hemorrhage would occur sooner if this were the cause. Again, it has been suggested that dilatation caused by taking up of the neck of the womb, liberating the placenta when attached to or over the internal os, is the cause of hemorrhage. This, in part, is probably true, but it must also be remembered that hemorrhages occur frequently before the last two weeks of utero-gestation, when the internal os has not been given up to the body of the womb—this change takes place within the last week or two of utero-gestation, and therefore cannot be considered the cause of the hemorrhage which occurs earlier in the case. The most probable cause suggested is that the uterus is always contracting during utero-gestation, that upon certain occasions the contractions became more violent than on others, and that during a very strong or firm contraction, especially in the latter stages of utero-gestation, some of the attachments of the placenta are torn away and hemorrhage ensues. Possibly this is the best explanation, because we find often in these cases that slight hemorrhages have occurred

and stopped of their own accord, without treatment or any interference.

Now, touching the question of frequency: Various statistics have been given on the subject. Johnson and Sinclair say that placenta prævia occurs once in 573 cases; others have said that it occurs once in 487 cases. The maternal mortality in placenta prævia is very great. Reed, in his treatise on placenta prævia, states that one case in every four and one-half dies. Churchill says one death occurs in every three cases. Barnes says that the mortality is placed too high, that one death occurs in every ten and one-half cases, as far as he has been able to collect the statistics.

In regard to treatment: Dr. Guntermann has touched the key-note. In placenta prævia, as in every other disease which the general practitioner is called upon to treat, he acts upon no special rule, he must treat every case as he finds it; the character and extent of the hemorrhage must govern very largely as to the method to be employed in saving the life of the woman, this being the main object in view. Where severe hemorrhages occur, say before the fourth or fifth month, I think it would be very unwise to wait for repeated hemorrhages; the uterus should be emptied of its contents as quickly as possible, and thus save the mother's life.

Inducing labor by rupturing the membranes: This has been suggested: rupture through the placenta, if necessary, in case of central implantation, draw off the waters and allow the uterus to contract; bring down the fetus, which will act as a plug in the mouth of the womb and in this way arrest the hemorrhage. I believe this

is a very good plan. I think after the sixth month that the best method is forcible dilatation with the hand. This can be practiced a little differently from the way Dr. Guntermann suggests. There is not much danger of laceration, because from the great loss of blood the patient is very much exhausted and the muscles are all relaxed, and therefore dilatation is not hard to accomplish. You can insert first one finger, then two, then three and afterward the entire hand; the hand can be slipped up alongside of the placenta into the uterus; the child can be brought down by the feet, which will act as a tampon; then you have arrested the hemorrhage. This is the plan employed in the three cases I have treated. Unfortunately, I was not able to save the lives of the children. Concerning statistics as to the life of the child—it is said that one-half of the children born after the seventh month live. It seems to me that the percentage of life is very large, as the hemorrhage in the majority of cases is frightful, and the child is in great danger of dying.

Dr. T. P. Satterwhite: There should be, if possible, an intelligent assistant always with the accoucheur. Of course we recognize where there is severe hemorrhage it should be checked as soon as possible, and there should always be a person to manipulate and help the uterus to contract while the accoucheur is delivering the child, which ought to be done, as has been stated, by first bringing down the foot; the child acts as a tampon and arrests the hemorrhage. I would give the woman 1-20th grain strychnia hypodermatically, and have the assistant with both hands keep constant pres-

sure upon the abdomen following the child down. Ergot should not be given under any circumstances until after delivery is accomplished. The danger of administering ergot lies in the fact that it causes contraction of the circular fibres of the uterus, often producing a very sad and fatal condition. I do not agree with Dr. Irwin as to the cause of hemorrhage. I think we all recognize at the latter part of utero-gestation that the cervix becomes completely obliterated, the outlet, like the fundus, being globe-shaped. As for Barnes' dilator, I had two at one time, but without use they became perfectly worthless. I agree with Dr. Irwin in his proposition that the fingers, properly applied, constitute the best means of dilating. By careful manipulation the fingers can be introduced into the uterus, the placenta, whether centrally attached or otherwise, can be detached and the child brought down. This, with pressure by an assistant from above, the hypodermatic injection of strychnia and the internal administration of quinine, I believe, will prove the best treatment for placenta prævia.

Dr. Louis Frank: It is the accepted teaching now that the cervix does not become obliterated during the latter period of utero-gestation. The authorities I have consulted recently, among them the last edition of Lusk and of Galabin, claim that the cervix does not give way at all; that the canal lies really obliquely, and, while it apparently disappears, yet it can be demonstrated by a careful examination that the neck does not become obliterated, that the obliteration does not occur until labor really sets in.

Dr. P. Guntermann: In answer to

the gentlemen who have spoken I would say that I have seen several cases of hemorrhage during the latter months of utero-gestation which were not due to placenta prævia, and one case which was due to placenta prævia, that I did not recognize at the time. I did not follow the method suggested by one of the speakers—to induce labor at once—I succeeded in relieving the alarming symptoms, the hemorrhage was checked and the patients went on to full term. I realize this will not always be the case, but it has happened in my practice several times where the hemorrhage was very profuse.

As to Dr. Bloom's question, whether the head ought to be delivered with forceps after turning—I did not state in my paper that we should *turn the child and deliver the head with forceps*; what I said was that we *should turn, or deliver with forceps*. It may, however, become necessary, after the body has been delivered, to extract the head with forceps, although such cases are very unusual.

Drs. Irwin and Satterwhite have simply confirmed the statements I made in my paper. We must remember that the neck of the womb is very vascular at the time of delivery, or during the last weeks of utero-gestation, and if we tear it, or make any extensive laceration, we are very apt to have hemorrhage, which increases the danger already existing.

Dr. J. M. Krim: I remember having seen a case with Dr. Leiber some time ago in which, after all hemorrhage had ceased and we could make proper traction, we found it impossible to deliver the head and forceps were used successfully, although the child was dead. I believe that forceps can be used to

advantage in cases where, after proper traction has been applied, you have been unable to accomplish delivery.

Dr. I. N. Bloom: In regard to the use of forceps in the character of cases under discussion, it seems to me with the left hand on the child's chest, by grasping the neck with the right hand, you have the best purchase that can possibly be obtained, and I really do not see why it should be necessary to apply the forceps, whether the child is alive or dead, it makes no difference.

Dr. J. W. Irwin: The question Dr. Bloom has raised is a very important one, and at first sight it looks like a difficult matter to apply forceps under the circumstances mentioned, but in case of a living child with a large head, pains feeble, and with a pelvis which is not very roomy, it becomes necessary to apply forceps oftener than one would imagine after breech presentations. I have used the forceps considerably in all forms of presentations, and I have at least a dozen times applied forceps in such cases as have been described, both in the cases of dead and living children, and I know that traction made in any other way sufficient to complete delivery might have broken the neck of the child. I have found the head wedged in the superior strait, and it was a difficult matter to disengage it and complete the delivery. By compressing the head, to some extent with forceps, in this way I was able to save the life of the child. Looking over some statistics for the last year, I find I have applied the forceps to the head twenty-seven times. In no case, however, did I apply forceps after a breech presentation, because it has not been necessary.

MOREHOUSE COUNTY (LA.) MEDICAL SOCIETY.

Benjamin H. Brodnax, M.D., presented a paper on

ACETANILID VS. QUININE TO ABORT
CHILLS AND FEVER; AND ACETANILID
AS A DUSTING POWDER
(See page 196.)

Discussion.

Dr. J. M. Anders: The paper which has just been read reports certain clinical facts of lively interest based upon personal observation. It seems strange at this time that anyone would assume to have obtained better results from the use of acetanilid in malarial intermittents than from the use of quinine. Unfortunately, Dr. Brodnax does not offer any experimental facts upon which to base an opinion of the mode of action of the acetanilid. The well-known antiseptic action of the drug is the only explanation that I can offer. I believe that Dr. Brodnax is a careful and reliable observer, and do not question the fact that cases of chills and fever were cured after even single doses of acetanilid. Although we have entered upon days of scientific therapeutics, I do not think that the days of rational empiricism have entirely passed away. We know that quinine cures chills and fever. Since that discovery nothing has been brought forward that will supplant quinine in the treatment of that disease. It is not impossible that such a remedy may be found; it may be that Dr. Brodnax has found it in acetanilid. I have met with cases of malarial intermittents in persons in whom there is an unpleasant idiosyncrasy against quinine. Now, in such

cases a better substitute for quinine than those we have at present would be welcome and of great advantage.

The question whether or not there are objections to the use of acetanilid might be asked. The statement has been made that acute dilatation of the heart sometimes occurs in intermittents. Now, it is known that acetanilid is a cardiac depressant, and in toxic doses has produced death by paralysis of the heart. While I do not consider this a bar to the use of acetanilid in the doses prescribed by Dr. Brodnax, I think that this influence makes it necessary to guard the heart during the time of its administration. If subsequent experience support these observations, the profession and members of this Society should give a vote of thanks to Dr. Brodnax for a new remedy for malaria, and one which promises to rank as a specific.

Dr. J. A. Cantrell: My experience with acetanilid in the treatment of disease has been in two hundred cases or more of skin eruption, especially intertrigo and eczema. I believe it to be the antiseptic that we are looking for in the place of iodoform. It does not have any irritating qualities that iodoform has, and, in fact, a great many cases of iodoform irritation have been cured by it. In very moist cases of skin disease it acts as a drying powder and also as an astringent. In other cases, like zoster, it acts well, dries up the eruption, and apparently it acts as a stop to the disease; at least, it seemed at the time as if acetanilid has produced this action.

Dr. G. G. Davis: Nobody would be more glad than myself for a satis-

factory substitute for the foul-smelling iodoform. Combinations have been brought forward of boric acid and other substances with iodoform. The mixture of boric acid I prefer to the pure iodoform. The boric acid breaks up the lumps which the iodoform contains and makes it a more manageable substance as a dusting powder. I have also used acetanilid by itself, but have been unable to persuade myself that it is the equal of iodoform for surgical purposes.

Dr. Edward Martin: I have used acetanilid in about a thousand cases of suppurating wounds, and my experience is, in these cases, that it is superior to iodoform. It is less toxic, for one thing. It is very common among surgeons to observe in slowly-healing wounds dressed daily with

iodoform, certain nervous symptoms, headache and so on, indicating iodoform poisoning. This is not seen in cases dressed with acetanilid; the wounds keep perfectly dry, there is no pus, and, of course, no odor, and the dressings keep as clean as with iodoform. I shall continue to use it in place of iodoform.

Dr. Davis: I think that the direction of surgical progress as regards the application of powdered antiseptic substances in recent wounds is on the decline, and I have no doubt that both the iodoform and the acetanilid will be eventually much less used than at present. Dr. Halsted, of Baltimore, makes an application of silver leaf take its place. Of course, drying powders will always be used in the treatment of suppurating wounds.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

March 26, 1895.

Dr. Wm. S. Gordon, President, in the chair.

The subject for the evening's discussion was a paper on

IMMUNITY FROM INFECTIOUS DISEASES, read by the Secretary. The following is an abstract:

The theories put forward to explain immunity are numerous. We shall consider—

1. The exhaustive theory. This supposes that the invading microbe takes from the system a substance necessary for its life and growth, exhausts it and it is never replaced; so that germs of a similar kind, seeking to attack the

body, can find no means of subsistence. Concerning this theory, Roosevelt, of New York, says: "It would be hard to believe that this could be the case if provision were only made for the growth and development of some *one species of germ*; but when we are called upon to believe that the majority of mankind come into the world with a separate and distinct 'substance' suited to the needs of the micro-organisms of small-pox, measles, yellow fever, etc., the imagination is staggered and the reason revolts against such a preposterous idea."

2. The antidote theory supposes that microbes, after entrance to the body,

produce a secretion (toxin) which is inimical to their own welfare. Upon it is based the action of antitoxin for diphtheria and tetanus. Reasoning by analogy is here brought into play. The excretions of man, if retained in the body, produce septic intoxication: so the presence of their excretions render the infecting bacteria harmless. This is plausible, but "we know of no organic compound which is not excreted or destroyed by the body within a short time after its introduction into the system." What goes on in the test-tube is not always an index of what occurs in the organism. Pepsin, for example, acts beautifully in the former, but how often have we been disappointed in it in the latter. In the test-tube the excretion products remain; in the system they are carted away as soon as formed.

3. The third theory may be termed that of the "survival of the fittest." In the contest between the invading bacteria and the body, the weak cells of the latter perish; the stronger survive, increase in power and transmit their strength to their progeny, thus following the law of inheritance. It may be called the congenital resistance of the tissues and cells.

It is conceded by most authorities that immunity to the infectious is due to the presence of substances formed by the metabolism of the cells. Investigations pursued in the past four or five years, notably by Vaughn, of Ann Arbor, and Aulde, of Philadelphia, have brought to light the fact that the bactericidal action of blood-serum is due to nuclein, a phosphorized proteid, formed chiefly by the multinuclear colorless corpuscles. It is non-poisonous and stimulates those organs whose function it is

to protect the body against disease. Aronson has, in all probability, recently obtained it from antitoxin. He, by the way, does not place faith in the antidotal action of this.

The production of a leucocytosis may be said to be synonymous with the production of immunity, if the white cells are healthy and are stimulated so as to secrete their nuclein. Leucocytoses exist in all infectious diseases where there is a local reaction, notably in croupous pneumonia. In typhoid fever there is none. Cold water will produce it, and thus we have an explanation of the good effects of cold baths. Massage has the same property.

Nuclein when injected does not act as a germicide directly, but stimulates the cells to renewed activity.

Attenuated cultures of microbes, or their toxins, when injected into a living body, have the power of stimulating the cells. The increased metabolism results in an increase of nuclein and along with it an increased power of resistance. We see then the action of antitoxin (sic), tuberculin, vaccine virus, erysipelatosus cultures, etc. Antitoxin has never yet been obtained directly from cultures in the test-tube.

It is probable that one of the functions of the liver is the extinction of bacteria and their products, as noted by Ewing (*N. Y. Med. Jour.*, March 2, 1895). Nuclein stimulated this organ and others that have to do with the formation of phagocytosis.

Dr. Hugh M. Taylor was surprised by one point brought out, and that was that the ptomaines did not kill the germs. He quoted Morris, who said that in some cases of appendicitis the ptomaines are so virulent as to destroy

the microbes causing the disease, recovery taking place.

The most plausible theory, to my mind, is the "survival of the fittest."

The President: When nuclein is given by the stomach the proteid portion may be acted upon, leaving the phosphorus to be absorbed alone. The good effect of the nuclein may be due to the phosphorus, which is a powerful stimulant, as seen in the administration of hypophosphites. It is an aphrodisiac and also excites the mental functions. He believes that Brown-Sequard's testicular extract and the organic extracts owe their good results to phosphorus. Resorption of the seminal fluid acts as a powerful stimulus, and it is rich in the same element. It is claimed that the adrenals, thymus and kindred glands are engaged in eliminating poisons. In leucorythæmia we have an increased number of colorless corpuscles, and yet death is almost certain.

Dr. J. W. Henson: It occurs to me that there are certain arguments in favor of the "survival of the fittest" and against the killing of the germs by toxins:

1. Some persons exposed to certain contagious diseases never take them under any circumstances. The toxins do not remain in the system and the immunity conferred by them, if at all, cannot be permanent, so there would be no reason why these diseases should not be contracted again.

2. After certain infectious diseases are contracted, they are not taken again, which is an argument in favor of the destruction of the weak cells and survival of the strongest.

Dr. Landon B. Edwards does not think that we have arrived at the point

to say to just what immunity is due. The theory of the "survival of the fittest" does not reach a number of germ diseases; small-pox, for instance, is not protective against other diseases. We are premature in taking a decided stand. Regarding isopathy, the doctor said we are on the border land of grand discoveries. In myxœdema and cretinism thyroid extract is working wonders.

The Secretary, in closing the discussion, said that what goes on in the test-tube is not necessarily indicative of what occurs in the living body. That the destruction of germs by their toxins occurs in the tube, is not denied; neither is it denied that alcohol produced in the tube by yeast cells destroys the latter. In the body we have the circulation, covering a large area and always in motion, and elimination is occurring incessantly. The conditions governing the two are dissimilar. The fact that the body immune to one disease is not immune so far as another is concerned, is not antagonistic to the "survival of the fittest." This is an educational process, and we know that perfect knowledge requires teaching of all branches and an absolute understanding of them.

We limit the term immunity to infectious diseases. Leucocythæmia, which shows a diminution of the colored blood corpuscles, rather than an increase of the colorless, does not come under this head. It is not the actual increase of these so much as their healthy condition, their power to secrete nuclein, that determine immunity.

REPORTS OF CASES.

Dr. Virginius W. Harrison: I wish

to report a case in order to exhibit to you a very pretty specimen of hydrosalpinx. The case is also interesting because of the variety of morbid conditions presenting.

On March 19, 1895, Mrs. H., aged 44, was sent by me to the Virginia Hospital to be prepared for a laparotomy for the removal of some growths. The next day I operated, ably assisted by Dr. Hugh M. Taylor, Dr. Geo. Ross administering chloroform. The first morbid condition seen was a pedunculated uterine fibroid weighing between two and a half and three pounds. It was attached to the upper portion of the posterior surface of the womb by a pedicle about two inches long and as broad as my two fingers. The pedicle was transfixed with a double ligature of silk near the uterus, the tumor tied off and the stump cauterized with a Paquelin. The next condition engaging our at-

tention was this large and very pretty specimen of hydrosalpinx of the right side, which I have here this evening. Its measurements soon after extirpation were thirteen inches in circumference, six inches in length and five in depth.

The adhesions to the pelvis and bowels were numerous, rendering its removal without rupturing the delicate covering difficult. It was successfully done, however, the tube tied and the stump cauterized. The ovaries were found in a degenerated state and resolved. In addition to the hydrosalpinx, an intra-ligamentous cyst, about half its size, was found on the right side. Unfortunately, in the attempt to remove it, it was ruptured.

The patient is doing well, with every indication of recovery, this being about the middle of the seventh day since the operation was performed.

MARK W. PEYSER, M.D., Sec'y.

Selected Papers.

OPIMUM IN THE DISEASES OF CHILDREN.

By Floyd M. Crandall, M.D., Adjunct Professor of Diseases of Children, New York Clinic.

It is the common belief that, although opium is one of the most useful of drugs in the diseases of adults, it is dangerous and not adapted to the needs of sick children. That it is an unsafe drug when administered to infants without discrimination, there can be no doubt. When given in proper doses and with knowledge of its therapeutic properties it is safe and satisfactory. It should be remembered

that it—1, stimulates the heart; 2, weakens the respiration by acting upon the respiratory center of the medulla; 3, blunts the sensory nerves; 4, decreases the secretion of the digestive tract, the bronchi and all mucous surfaces, the liver and various glands; 5, increases, often, the secretion of the skin and kidneys; 6, decreases the action of the unstripped muscular fibre, thus checking peristalsis and

spasm of the intestine, spasm of ducts and action of the bronchi and bladder. A drug acting in such varied ways cannot be used thoughtlessly without untoward results.

In diarrhœa much opposition to opium has arisen during recent years, due chiefly to misapprehension as to its proper applications. While its improper use may do much harm, it is an agent of the greatest value, and should not be abandoned. It is contra-indicated—1, in the first stages of acute diarrhœa before the intestinal canal has been freed from decomposing matter; 2, when the passages are infrequent and of bad odor; 3, when there is a high temperature or cerebral symptoms are present; 4, when its use is followed by elevation of temperature or the passages become more offensive. It is indicated—1, when the passages are frequent, with pain; 2, when the passages are large and watery; 3, in dysenteric diarrhœa, together with castor oil or a saline; 4, in late stages, with small, frequent, nagging passages; 5, when the passages consist largely of undigested food, and the bowels act as soon as food is taken into the stomach.

The dose should be as small as possible, sufficient being given to materially relieve pain and check peristalsis. It should not be added to the ordinary diarrhœa mixture, to be repeated at short intervals. It should be given alone and at intervals sufficient to allow the effect of one dose to subside before another is given. This interval will rarely be less than four hours.

Opium is frequently employed to allay cough. The chief office of ordinary cough syrup seems to be to destroy the appetite, disturb the diges-

tion and make the child peevish. For an expectorant cough it should be given sparingly—the more the secretion the less the opium. In non-expectorant coughs it may be used more freely. In the dry, painful cough of pleurisy, it may be given more freely than in almost any other condition. In the early, dry stage of bronchitis it may be given in small doses as well as for the harassing cough of the latter stages, if the respiration is free and the circulation is good. It should never be given in doses sufficient to materially retard expectoration. A full dose of opium, combined with ipecac, is still one of the most efficient means of relieving spasmodic croup.

For the relief of pain, no drug equals opium. When actual pain is present, it may be given to children with perfect propriety. Condemnation cannot be too strong, however, against its use for minor ills and aches. It should never be used for sleeplessness, unless due to actual pain. It is unwise to allow a mother to suppose that she can use paregoric. If it is indicated, let it be prescribed or left diluted and ready for use. A few tablets triturate may be carried, each representing ten minims of paregoric. These can be left with the assurance that no more will be given than is intended, and the mother will be in ignorance as to their exact nature. When a child is cross and irritable, the temptation to the mother to repeat an opiate is very great, and should be guarded against as far as possible. The number of babies who have been forced into the opium habit is appallingly large. It results largely from the use of soothing syrup and paregoric. An abnormally quiet child during the

first ten days is an object of suspicion. Opium is frequently given by monthly nurses to keep the baby quiet and assure rest for herself.

The dose of opium varies greatly, and no positive rules can be given. It is comparatively small, especially under eight months. As a general rule, one minim of paregoric (equivalent to two drops) may be given for each month of the baby's age. At one year three-fourths of a minim of the deodorized tincture is a full dose, or three-fourths of a grain of Dover's powder. Morphia is rarely indicated at this age. The dose should not exceed 1-120 of a grain when given hypodermically. The initial dose of opium should be small, and its effect should be noted before it is repeated.—*Gaillard's Med. Jour.*

DR. WINSLOW'S TREATMENT OF HOMICIDAL MANIA.—Apropos of a number of cases of apparently causeless stabbing in the streets of London, Dr. Forbes Winslow, in a letter to one of the newspapers, made the following recommendation:

"In the case of a person who kills another in the street without motive, a certain congestion of the brain and rush of blood take place. If one were to strike him on the nose, a blow which would cause the loss of blood, it would afford instant relief, and he would no longer be actuated by the impulse to murder. These ordinary homicidal lunatics, who are sane on the surface, are the most difficult to deal with. You may talk to them for four hours and they will appear perfectly rational. Yet they will suddenly go out and attempt to kill the first person they meet. The typical homicidal lunatic, unlike

the man who is afflicted with a desire to commit suicide, is incurable." He adds that the number of homicidal lunatics at large in London is greater than usual, and that he is frequently visited by madmen who are unaccompanied, some of whom want to kill him, and others ask to be prevented from killing others.—*Medical Record.*

THE CHEMISTRY OF CLEANLINESS.—*Nature* publishes an article that proves the virtues of cleanliness to be more than æsthetic. The sudoriferous glands perform the important function of throwing off the moisture produced during the combustion of waste tissue by the oxygen of the blood, and secrete 23 ozs. of perspiration in 24 hours. The conversion of perspiration into vapor renders latent a great amount of heat and keeps the body cool. Water at 120° is almost unbearable; but heat in an oven to the extent of 325° may be borne for a time. In the 23 ozs. of perspiration secreted daily there is about one ounce of animal matter. This is left behind on evaporation. Sebaceous glands also secrete oily and resinous substances. This, mixing with the solid matter and dirt, forms a compound which tends to clog the pores of the skin. The removal of this compound is largely the source of the feeling of refreshment and *bien aise* following a vigorous morning bath.—*Ibid.*

THE BOARD OF MEDICAL EXAMINERS will meet in Goldsboro on Monday, May 13th, for the examination of applicants for license to practice medicine in the State of North Carolina.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR

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Editorial.

CONTAGION AND THE COMMUNION CUP.

For some months a discussion has been going the rounds of the medical, religious and secular papers in regard to the danger of contagion from the use of a common communion cup by congregations of people. Not only have writers been discussing the subject as individuals, but it has been brought up in the meetings of medical societies and in the conventions of religious bodies. In some of these resolutions have been adopted condemning the use of the common cup, and in the majority of bodies where the resolution has been introduced, the vote has been well divided.

We have refrained from expressing

our opinion on this subject heretofore, and these remarks, which will be very brief, are brought out by the receipt of the following letter:

"542, BROAD ST., NEWARK, N. J

"DR. ROBERT D. JEWETT:

"*Dear Sir*:—The subject of the individual communion cup, which is being so generally discussed in our city and all over the country, greatly interests me. The lack of cleanliness in the common cup and the danger of contagion from its use, are recognized by many of our best medical authorities. Desiring the opinion of prominent physicians, clergymen and laymen upon the subject, I take the liberty of asking if you will favor me with your views? If you do so may I quote from your opinion?

"Yours, respectfully,

"EDWIN J. HOWE, M.D."

That it is possible to convey disease from one person to another through the medium of the communion cup, all believers in the germ theory of disease must acknowledge, for, because the cup is a factor in the performance of a religious rite, it is not more likely to destroy the activity of a germ that may adhere to it than could any other fomes. A violation of the laws of Nature or God, will surely bring punishment to the offender, though he be ignorant of the fact that he is violating those laws, or even though his purpose be to serve God or to advance the welfare of his fellow-men.

On the other hand, while this possibility must be acknowledged, we believe that it cannot be definitely proven that any single case of disease can be certainly traced to contagion through the communion cup. The customs and traditions of a people are dear to them and should not be thoughtlessly destroyed. We are heartily in favor of all legitimate sanitary reform, but we

look upon this movement as an extreme measure on the part of misguided enthusiasts, who, in their endeavor to discover some new idea with which to startle the world and cause a sensation, have complacently swallowed the camel and are now straining at the gnat. Of all the methods of contracting disease that have been sprung upon an all-credulous people, we believe this is about the most insignificant. We cannot help likening those who are using so much energy to wipe out this insignificant source of infection to the doctor who would spend his time in sewing up small wounds on a patient's legs while he is bleeding to death from a wound of the jugular. Were these gentlemen to so direct their efforts that the ventilation and heating of one or two improperly constructed churches were made perfect, they would be the means of saving more lives than if they persuaded all the churches in the country to adopt the individual communion cup.

Abstracts.

OBSERVATIONS ON THE TREATMENT OF FIBROIDS OF THE UTERUS.—Dr. O. S. Phelps, of New York (*American Medico-Surg. Bull.*), reports an unusually complicated case of uterine fibroid in a girl 17 years of age, who came under his care in July, 1894. She was sent from the West to New York by the family physician to have a hysterectomy performed, and came directly to his sanitarium. The tumor was 8 to 10 centimeters in diameter, and crowded the uterus well over to the

left side. The uterine cavity measured 5 inches and the organ, with its appendages, was surrounded and bound down by an inflammatory exudate. The bladder was impinged upon so that it could not hold more than one or two ounces of urine, causing the patient great agony to evacuate it. The whole mass, including tumor, exudate, uterus and appendages, filled the pelvis and rose well up to the umbilicus. The patient was much emaciated, weighed 60 pounds (normal

weight 125 pounds), could not stand or talk, nor could she turn in bed without great pain. Temperature 100° to 130° . Dr. A. H. Goelet was called in consultation and confirmed the diagnosis; he also agreed that no operation could be considered at that time, but thought ligation of the uterine arteries might be resorted to later. The treatment adopted was the high tension faradic current, 15 minutes, thrice daily, vagino-sacral and abdominal. At each seance the temperature was reduced $\frac{1}{2}$ to 1 degree, lasting one to two hours. A system of feeding was adopted under the guidance of microscopical observations of the blood and secretion to determine the correct choice of foods. In two months the temperature remained normal and the weight had increased 30 pounds. Galvanism was then begun, with anode to tumor per vaginam, by means of a special clay electrode with cathode closely adapted to tumor over abdomen; 20 to 30 milliamperes of current, 7 to 10 minutes, every five days. On January 15 tumor was reduced to a mere nodule about the size of a small walnut, exudation gone, uterine cavity measured $2\frac{3}{4}$ inches. Patient's weight was then 125 pounds.

Conclusions.—The writer ascribes the favorable results in this case—

1. To a systematic plan for restoring the nutrition, under such favorable conditions as are afforded by a sanitarium.

2. To the persistent use of the high tension faradic current to allay pain, reduce inflammation and induce absorption.

3. To the galvanic current, so applied as to concentrate its action upon the fibroid growth.

GRIPPE.—Dr. Andrew H. Smith, in the *N. Y. Medical Record*, in discussing the treatment of gripe, says:

"In regard to treatment, the use of some one of the coal-tar antipyretics during the first stage, to relieve the pain, still seems to hold its place. I have tried to guard against the depressing effects of these agents and to check their tendency to produce excessive sweating; the first, by employing only moderate doses and by adding a little camphor; the second, by the further addition of atropia. A convenient pill is composed of three and a half grains of phenacetin, one-half grain of camphor and 1-300 of a grain of atropia sulphate. Two of these pills may be given at the outset, followed by one every three hours until the temperature falls and the pain is relieved.

"For the subsequent annoying cough the temptation to prescribe opiates is very great. But they add to the dryness of the tracheal and laryngeal surfaces, and if continued, seem to retard rather than to promote recovery. It is better to employ them only when demanded to procure necessary rest. For this purpose Tully's powder does extremely well. The bromides, by allaying reflex irritability, are very useful. The ammonium bromide, being largely excreted through the lungs, exerts a more decided local influence, and it is at the same time less depressing than the other forms. Yerba santa has done me good service, especially in combination with maltine, for which hot milk is an excellent vehicle.

"The mucous surface of the larynx and trachea may be treated locally with advantage by inhalation of warm

vapor containing a small amount of carbolic acid. The vapor relieves the dryness of the membrane, while the acid exerts its peculiar anæsthetic effect. Conium also is useful, employed in this way. Maw's inhaler is the simplest and most convenient apparatus for this form of inhalation. A spray of carbolic acid in aboline oil will sometimes produce a more lasting effect than a preparation with water as a menstruum."—*Brooklyn Med. Jour.*

BICYCLING FOR WOMEN.—Dickinson (*Amer. Jour. of Obst.*, January 1895) concludes that "under proper conditions of costume and posture, with care that the exercise be gradually increased and properly graded for the individual case, and where there is no acute inflammation to contraindicate it, bicycling will probably show itself capable of large results as an agent in curing pelvic disorders, since it is one of the few exercises which attract women.

"In view of women's disabilities and the disadvantages under which she has suffered in attempts to obtain interesting and beneficial muscular exercise, it seems hardly too much to say that the promise from the bicycle is far-reaching. Through it and the habits it will engender, we look for better dress, freer dress, shorter dress in bad weather; for better exercise, for out-of-door activity, for steadier nerves, stronger muscles, painless periods, easy labors."—*Ibid.*

NEW OBSERVATIONS IN GONORRHOEA.—At the recent meeting of the German Dermatological Association, considerable time was devoted to the discussion of the etiology of gonorrhœa, and

among the interesting points brought out, an observation by Wertheim is deserving of especial attention. This careful investigator has found that gonococci obtained from the secretions of chronic gonorrhœa can be cultivated so as to acquire a high degree of virulence, and when inoculated in the urethra of the patient from whom they were derived, will give rise to an intense gonorrhœal inflammation. It has been quite frequently observed that patients suffering from latent gonorrhœa at the time of marriage have infected their wives and at a later period acquired from them in return an acute urethral inflammation. Wertheim's experiments are, therefore, of importance in affording a rational and scientific explanation of this clinical observation.—*Int. Jour. Surg.*

ALBUMIN IN URINE.—Dr. C. Fouchlos (*Progrès Medical*) recommends two new tests for albumin in urine, for which he claims utmost delicacy and absence of any possible fallacy:

1. Add to the suspected urine a few drops of a 1 per cent. solution of corrosive sublimate; in case of turbidity, add some drops of acetic acid. If the turbidity persists, it is due to the presence of albumin.

2. Take 100 c.c. of a 10 per cent. solution of sulpho-cyanide of potassium, and mix with it 20 c.c. of acetic acid. Add a few drops of this mixture to the urine. If albumin is present in small quantities, an immediate turbidity will ensue; if in larger quantities, a heavy white precipitate will appear.—*Med. and Surg. Reporter.*

ANTIPYRIN AS A HÆMOSTATIC.—Dr. Roswell Park, in the *Medical News*, recommends a 5 per cent. solution of

antipyrin in sterilized water as an efficient hæmostatic. He uses it as a spray in the nasal cavity, for epistaxis, upon the peritoneum, upon the surface of the brain or wherever else there is oozing. Of course it has not power to contract vessels of any size that spurt, but will almost instantly check oozing. He has found it also to be unirritating. —*Brooklyn Med. Jour.*

THE CLINICAL SIGNIFICANCE OF PERIGASTRIC ADHESIONS. — According to the Paris correspondent of the *Lancet*, Professor Terrier, about a year ago, reported the case of a woman affected with intense pain in the epigastrium, due to the presence of adhesions binding the stomach to the neighboring organs. Laparotomy was performed, and the most careful examination failed to bring to light any other cause for the trouble than the existence of these adhesions, the rupture of which brought about a lasting recovery. Since then M. Terrier has had under his care a woman, aged 50, in whom symptoms referable to the stomach had appeared ten years ago. These symptoms were dyspepsia, vomiting and great pain. After a respite of two years the same trouble reappeared, accompanied with hæmatemesis. A second respite, lasting three years, was followed by a third attack, and a fourth attack occurring in October, in 1893, brought her in an emaciated state under the notice of M. Terrier. The epigastric region was doughy to the touch, and the stomach was dilated. Laparotomy brought to light a slight induration at the cardiac orifice and numerous adhesions between the stomach, the liver and the omentum. The adhesions were divi-

ded and the woman has remained well ever since. M. Championnière had under treatment, three years ago, a man who had suffered for twelve years from epigastric pains. The most contradictory diagnosis had been advanced to account for his trouble. Stoicesco, of Budapest, was the only surgeon who had suggested the existence of perigastric adhesions, the idea being based upon the fact that the seizures occurred one hour after meals, and reached a climax two hours later. Laparotomy was had recourse to by M. Championnière, and dense ligeneous adhesions were discovered binding together the stomach, liver and omentum. So hard were they that much difficulty was experienced in sectioning them. The only morbid antecedent that could in this case possibly account for the presence of the bands was an almost forgotten abscess of the liver which had emptied itself into the gut. —*Med. Record.*

BACILLI TUBERCULOSIS IN CIGARS. — Dr. Kerez (*Centralblatt für Bacteriologie*) reports the result of experiments which he has been making for the purpose of determining the possibility of the communication of tuberculosis through the medium of cigars. It is a well-known fact that cigar-makers are in the habit of making the leaves adhere to the cigars by moistening them with saliva from their own mouths. The force of habit leads them to continue this practice, although in recent times manufacturers provide their workmen with materials for the purpose indicated. Dr. Kerez made cigars by moistening the leaves with saliva known to contain tubercle bacilli. The cigars were then dried and packed

away in boxes in the usual manner. It was found afterward, when the cigars were unrolled and the leaves washed in water, that the infusion thus obtained, having been injected into Guinea-pigs produced tuberculosis, clearly showing that cigars may thus be the means of communicating tubercle bacilli and giving rise to pulmonary disease.—*La Medecine Moderne*.

GASTROSTOMY FOR FOREIGN BODIES.

—At a recent meeting of the Leeds and West Riding Medico-Chirurgical Society, Mr. Mayo Robson read an interesting paper upon a remarkable case of foreign bodies removed from the stomach of a child by gastrostomy. The patient was ten years of age and had been admitted into the hospital for gastric symptoms which were not of a very definite nature. For eight months the symptoms had persisted without yielding to any treatment. However, while under observation in the hospital, the patient vomited a nail. It was then decided to open the stomach, and as a result of the operation the following curious collection of heterogeneous objects were removed: 47 cast-iron garden nails, $1\frac{5}{8}$ inches long; 93 brass and tin tacks, $\frac{1}{2}$ inch to 1 inch long; 12 large nails, some brass-headed; 3 collar studs, 1 safety-pin, 1 sewing-needle. All these, of course, had during the previous eight months been swallowed by the child. The operation healed by first intention, the patient making a complete recovery.—*Boston Med. and Surg. Jour.*

PERSISTENCE OF THE DIPHTHERIA BACILLUS IN THE THROAT FOR SEVEN AND A HALF MONTHS.—Schäfer, in the *Brit. Med. Jour.* of January 12th, reports the case of a boy who had an

attack of "tonsillitis" early in last May, which was recognized to be diphtheritic on the occurrence of characteristic paralyzes, two months later. Seven and a half months later two other boys in the same school, one of whom slept in the same dormitory, and the other of whom shared a desk with the May case, came down with diphtheria. A sample of mucus from the throat of the May case was sent for examination along with the others, and was found to contain numerous colonies of typical Löffler bacilli, which, on inoculation into animals, proved to be active. This is the first instance reported of the persistence of virulent bacilli for so long a period.—*Ibid.*

INDICANURIA.—Dr. Gehlig gives the following conclusions, based upon a considerable number of observations upon children, both sick and well:

1. Nurslings in good health or children fed upon sterilized milk, and not the subjects of digestive troubles, sometimes present a trace of indican in the urine.

2. If digestive disturbances occur almost always some indican is found, its quantity varying with the gravity of the affection. In chronic catarrh of the intestine, cholera and typhoid fever, it is particularly marked.

3. In older children without digestive trouble, the urine normally contains indican. If the diet includes a high proportion of nitrogenous food (eggs, meat), indican becomes more abundant.

4. There can be no relation between tuberculosis and a more or less marked indicanuria.

Cima has published the results of

examinations in 68 cases. Most of these children were fed simply on bread and milk, some on bouillon, vegetables and eggs, and others on mother's or cow's milk.

1. Cases of clinically declared tuberculosis of abdominal or thoracic organs—10 cases. Almost all had some irregularity of digestion and the stools were mostly liquid or semi-fluid. In 99 analyses 69, or 69.69 per cent., gave positive reactions, while medium or very marked reactions were given in nearly half, or 45.5 per cent. In these same cases very marked reactions were obtained after some days of feeding upon a diet richer in albuminoids, or during constipation. On the other hand, the reaction was slight or feeble when the children were put upon milk or had liquid or semi-fluid stools.

2. Cases suspected of tuberculosis, with adenopathy, chronic catarrh of intestines, or intermittent catarrh of bronchi—23 cases. In 73 analyses, 75.34 per cent. gave positive reactions, or 46.57 per cent. of medium or marked reactions.

3. Cases of divers acute and chronic diseases—35 cases. In 88 examinations 38 were without reaction, while 30 per cent. of medium or marked reaction were given for the most part by children over 2 years of age nourished on a mixed diet.

The conclusion from these results is that the indican reaction in the urine is more positively connected with anomalies of digestion, especially in mixed feeding, than with the principal malady. Consequently indican has no other diagnostic importance than of indicating the degree of decomposition of albuminoid substances in the intestines.—*American Jour. of the Med. Sci.*

TUMORS OF THE PLACENTA. — Dr. Edward Alin observed an interesting case of this nature in a III-para, 29 years of age, the placenta weighing 21 ounces. In the marginal portion there was a solid tumor as large as a hen's egg, and another the size of a walnut, in the centre of the placenta. (*University Medical Magazine*.) Both tumors were made up of numerous smaller ones, varying in size from the head of a pin to a hazel-nut. The tumors could be easily distinguished from the rest of the placental tissue by their compact appearance. There were no other tumors, infarcts, or hemorrhage, or any condition which would indicate an impediment in circulation, and no inflammatory areas or signs of degeneration. The tumors were found to consist of capillary vessels, surrounded by scanty connective tissue with few cells. There was no trace of a sarcomatous structure. The endothelium of the vessels consisted of a single layer, with well-defined cells, coloring easily. The author regarded the tumors as due to hypertrophy of the chorionic villi with abundant vascularization.—*Medical Record*.

PHOTOGRAPHING THE WOMB. — A Swiss physician has described a method of dilating the uterus by means of tents, so that by the use of a mirror a perfect view may be obtained of the interior of the organ. Not content with this, however, he is unselfish enough to desire to obtain photographs of the uterine interior in various diseases of the organ. The future of woman is sad, indeed, if now her womb must not only be felt of, sounded and measured, but photographed as well.—*N. Y. Polyclinic*.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From March 21 to April 3, 1895:

The following officers are detailed to represent the Medical Department of the Army as delegates at the annual meeting of the Association of Military Surgeons of the United States, to be held in Buffalo, New York, May 21 to 23, 1895: Lieut. Col. Dallas Bache, Deputy Surgeon General; Major Philip F. Harvey, Surgeon; Captain Daniel M. Appel, Assistant Surgeon. They will proceed from their respective stations in time to reach Buffalo on May 21, 1895, and upon adjournment of the meeting will return to their proper stations.

The following named officers are detailed to represent the Medical Department of the Army as delegates at the annual meeting of the American Medical Association, to be held at Baltimore, Md., May 7 to 10, 1895: Lieut. Col. Wm. H. Forwood, Deputy Surgeon General; Major Charles K. Winne, Surgeon; Major Walter Reed, Surgeon, and Captain Harry O. Perley, Assistant Surgeon. They will proceed from their respective stations in time to reach Baltimore on May 7, and upon the adjournment of the meeting will return to their proper stations.

Captain Rudolph G. Ebert, Assistant Surgeon; relieved from duty at Fort Huachuca, Arizona, and ordered to Fort Columbus, New York, for duty at that post.

Captain Paul Shillock, Assistant Surgeon, relieved from duty at Fort Wingate, New Mexico, and ordered to Madison Barracks, New York, for duty at that post, to relieve Captain Robt. B. Benham, Assistant Surgeon. Capt. Benham, on being relieved by Capt. Shillock, will report in person for duty at Fort Wingate, New Mexico.

Stiles, Henry R.—The extension of leave of absence on surgeon's certificate of disability, granted First Lieut. Henry R. Stiles, Assistant Surgeon, is

still further extended two months on surgeon's certificate of disability.

Poindexter, Jefferson D.—Leave of absence for one month is granted Capt. Jefferson D. Poindexter, Assistant Surgeon.

Gibson, Joseph R.—The leave of absence, on account of sickness, granted Lieut. Col. Joseph R. Gibson, Deputy Surgeon General, is still further extended six months on surgeon's certificate of disability.

Shannon, Wm. C.—Leave of absence for three months, to take effect on the expiration of his present sick leave, with permission to leave the United States during May and June, 1895, is granted Capt. William C. Shannon, Assistant Surgeon.

Frick, Euclid B.—Capt. Euclid B. Frick, Assistant Surgeon, will be relieved from duty at Fort Townsend, Washington, to take effect upon the expiration of his present leave of absence, and will then report for duty at Presidio, of San Francisco, California, relieving Capt. Charles Willcox, Assistant Surgeon. Captain Willcox, upon being thus relieved, will report for duty at the United States Military Academy, West Point, New York, relieving First Lieutenant Frederick P. Reynolds, Assistant Surgeon. Lieut. Reynolds, on being thus relieved, will report for duty at Fort Sam Houston, Texas.

THE NAVY.

Three weeks ending April 13, 1895:

Pickett, G. McC., P. A. Surgeon, detached from U. S. S. "Newark," and granted three months leave.

Dunbar, A. W., Assistant Surgeon, detached from U. S. R. S. "Vermont," and ordered to the U. S. S. "Newark."

LaMotte, Henry, Assistant Surgeon, detached from U. S. S. "Newark," ordered home and two months leave.

Bagg, C. P., Assistant Surgeon, detached from U. S. N. Hospital, Mare Island, Cal., and ordered to the U. S. S. "Monterey."

Baldwin, L. B., Surgeon, detached from Pensacola Navy Yard and ordered to the U. S. S. "Montgomery."

Hope, J. S., Assistant Surgeon, ordered to the U. S. S. "Montgomery."

Wells, Howard, Surgeon, detached from the U. S. S. "Montgomery" and granted three months leave.

MARINE HOSPITAL SERVICE.

Official list of the changes of stations and duties of medical officers of the United States Marine Hospital Service, for the fifteen days ending March 30, 1895:

Vaughan, G. T., P. A. Surgeon, to

proceed to Philadelphia, Pa., and assume command of service March 28th, 1895.

Gardner, C. H., Assistant Surgeon, granted leave of absence for fifteen days, March 22, 1895.

Cumming, H. D., Assistant Surgeon, to rejoin station at New York, N. Y., March 16, 1895.

Promotion.

Eagen, J. M., commissioned as P. A. Surgeon, March 26, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

Dr. W. L. Hudson has removed from Hawley's Store to Dunn, N. C., where he will continue the practice of medicine.

We regret to learn that the *American Lancet*, one of our most highly appreciated exchanges, has been discontinued.

Mr. Geo. S. Davis, the medical publisher, of Detroit, Michigan, will begin soon the publication of a new medical monthly, to be called *Medicine*.

Dr. A. A. Kent, the Leader of Debate at the approaching meeting of the Society, has selected for his subject The Abuse of Alcoholic Stimulants in Practice.

The *Buffalo Medical and Surgical Journal* will soon reach the ripe age of fifty years. The able editor, Dr. Wm. Warren Potter, will signalize its semi-

centennial anniversary by increasing its reading pages from sixty-four to eighty, and by making other improvements that will contribute to its efficiency. This journal is already one of the very best medical monthlies in the country, and we extend our sincerest congratulations to the Editor on the great success the past has brought, and wish him still more in the future.

Dr. Welch, the bacteriologist for Johns Hopkins Hospital, has demonstrated that germs will not grow in the immediate vicinity of silver. A sterilized silver wire was introduced into a culture, and, while the colonies grew as usual elsewhere, immediately about the wire was free from them. Drs. Halsted and Kelly are making use of this discovery by using silver foil in the dressing of aseptic surgical wounds. The foil is placed immediately in contact with the closed incision in sheets

about four inches square, and then the other aseptic dressings are applied.

The *Buffalo Druggist* is a new pharmaceutical monthly, published in Buffalo, N. Y.. The initial number has reached our table and promises well for the future.

When you write to any of our advertisers, Doctor, it would be but very little trouble to say you saw the advertisement in the NORTH CAROLINA MEDICAL JOURNAL, but it would help the JOURNAL.

Two members are to be elected at the approaching meeting of the Society to fill the vacancies on the State Board of Health caused by the expiration of the terms of office of Dr. W. H. Harrell and Dr. John Whitehead.

Regular attendants upon the Society meetings will remember that for several years Mr. Garvens, of the firm of Bartlett, Garvens & Co., Richmond, Va., has been on hand with a beautiful line of instruments. We are pleased to learn that he will be with us again this year.

The secular papers are circulating the report that Dr. Charles Waldstein has discovered that pilocarpin in minute doses is curative in consumption and cancer, through its stimulative action on the lymphatics. The papers must have news, even if it does come high. In telling what pilocarpin is, the *N. Y. Herald* gives the dose at *three grains*, hypodermatically.

The revolt in Cuba affects this country in more ways than one. Yellow fever is raging at Havana, particularly among the unacclimated Spanish troops.

This means that the quarantine authorities of the Gulf and South Atlantic States will have to exercise more than ordinary care if they would keep out the disease from our shores. The probability of secret communication between the Island and Florida makes the danger more threatening.

While in Philadelphia, recently, we had the pleasure of meeting Mr. E. A. Yarnall, the leading surgical instrument manufacturer of that city. He informed us of his intention to be present at the Goldsboro meeting with a full assortment of instruments. All will welcome him.

All those who intend to read papers at the meeting of the Society in Goldsboro, May 14th to 16th, and who have not sent in the titles of their essays to the Secretary of the Society at Wilmington, have only a few days now in which to do so, if they secure a place on the program.

We learn that the plans and specifications for the Cape Fear Quarantine Station have been completed and accepted, and that bids for doing the work have been asked for. This means that the work will soon be commenced, and as it will require but a short time to complete the station, we hope to see it in operation by the middle of the summer. The Government appropriated \$25,000 for the establishment of the Station and \$2,000 a year for its maintenance.

WHAT ARE WE COMING TO?

(Public School, first grade, A. D., 1905.)

Teacher (to applicant for admission).—"Johnnie, have you got a cer-

tificate of vaccination for small-pox?"

"Yes, sir."

"Have you been inoculated for croup?"

"Yes, sir."

"Been treated with diphtheria-serum?"

"Yes, sir."

"Had your arm scratched with cholera bacilli?"

"Yes, sir?"

"Have you a written guarantee that

you are proof against whooping-cough, measles, mumps, scarlet fever and old age?"

"Yes, sir."

"Have you your own private drinking-cup?"

"Yes, sir?"

"Do you promise not to exchange sponges with the boy next to you and never use any but your own pencil?"

"Yes, sir."

—*Times and Register.*

Reading Notices.

Celerina is indicated in cases of nervous sick headache, caused from over-work or study.

Dysmenorrhœa with Habitual Constipation:

Stearns' Cascara Aromatic, — 1 fl. oz
Simple Elixir, — — — — 2 fl. oz
Syrup of Sarsaparilla Compound 1 fl. oz
Mix. Sig: Teaspoonful three times a day before meals.

The Rio Chemical Company, of St. Louis, if it had never done more than present to the profession its valuable S. H. Kennedy's Extract of *Pinus Canadensis*, would have placed the profession under a lasting obligation to it. There is no more healthful, stimulating and generally beneficial application that can be made to a diseased mucous membrane than this.—*Medical Mirror.*

Experience of a Medical Journalist with Nervous Exhaustion.—I take this occasion to write you in grateful recognition of what your Petroleum Emulsion has done for me. Noting your advertisement in the *Medical Century*, I called our Editor's attention to it as being possibly beneficial in my own case of nervous exhaustion and general tissue debility, Dr. Fisher indorsed the Emulsion so heartily that I have

since been using it as a daily diet, and find the effect most invigorating and soothing. Yours, very truly,

(Signe) R. E. YOUNG, Mgr.

In the after-treatment of a case where an "Operation for the Relief of an Impermeable Occlusion of the Oesophagus of Five Years Standing" had been performed, which operation was reported at length in the *N. Y. Medical Journal* of March 23d, 1895, Dr. Augustus C. Bernays, A.M., M.D., Heidelberg, M.R.C.S., Eng., Professor of Anatomy and Clinical Surgery at the Marion-Sims College of Medicine, the operating Surgeon says:

"The patient rallied fairly well after the operation, but she became greatly emaciated. Liquid food was given at short intervals and stimulants as indications demanded. In order to allay the extreme nervousness and irritability, antikamnia was given, and it acted promptly and satisfactorily in every instance."

Of the further history of the case, it may be further stated that, on the seventh day after operation, the patient took into her stomach, through the natural channel, the first food which had passed it in five years, and that in two months convalescence was regarded as fully established.

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, MAY 5, 1895.

No. 9.

Original Communications.

LOCAL ELECTROLYSIS AND ZINC-AMALGAM CATAPHORESIS IN MALIGNANT AND NON-MALIGNANT TUMORS.*

BY G. BETTON MASSEY, M.D., Physician to the Gynecological Department of
the Howard Hospital and to the Sanatorium for Diseases of Women
and the Nervous System, etc.

Before reporting the three cases on which this new treatment of morbid growths is mainly based, I must explain what I mean by local electrolysis and zinc-amalgam cataphoresis, and also advance reasons for my belief that these methods, either separately or together, present important advantages over cutting operations in certain cases of benign vascular growths and incipient cancers.

Local electrolysis means simply that the electrical decomposition of the tissue salts is confined to a localized area by the approximation of the poles. If both poles of a galvanic current be placed in the morbid tissue quite near

each other, the bulk of the current will be concentrated within the portion of tissue immediately between them, and but little will traverse the outside healthy parts. In practice they should not be further apart than from a half to one inch, though this depends entirely on the strength of current to be used and the size of the growth. So placed, an enormous current may be employed to dissolve a morbid tissue without affecting surrounding tissues, the parts having been chilled by a spray, or otherwise rendered anæsthetic, if sensitive. The surgical possibilities of such currents are quite remarkable. All the salts and liquids of a given growth lying between the points become a prey to such a current,

*Read before the Philadelphia County Medical Society, January 9, 1895.

the watery contents being turned into oxygen and hydrogen gases, and the complex salts into solutions of acids and alkalies. This, of course, attended with a material rise of temperature, but nothing like charring. If the tissue subjected to the process is soft and vascular, or juicy, there will be very little left between the poles after the gas has been given off but the acids and alkaloids dissolved in a turbid liquid remainder. If the tissue is tougher and more fibrous, a gristly residue will be found, which can be detached or left to be detached by nature.

The strength of current required to destroy tissue in this day depends altogether on its concentration at the active spot. A minute reproduction of the process occurs when we apply but two or three milliamperes to the papilla of a hair sheath, or to a mole on the skin; but to completely dissolve tissues between two or more needles a half inch apart requires at least four hundred to seven hundred milliamperes.

Whether this portion of my method has any advantages over a cutting operation in removing malignant or non-malignant external growths depends upon circumstances. It is clearly inapplicable to any growth within the body unless it is situated in a drainable natural cavity, as a considerable quantity of detritus must drain away. It also presents the disadvantage of not permitting healthy tissues to be united at once over the seat of the removed growth, a procedure, however, that is often of doubtful utility, as it frequently covers up portions of the disease that failed to be removed. The advantages of the method over

the knife are, on the other hand, by no means inconsiderable. It is absolutely bloodless, no matter where applied, thus enormously conserving strength after operations notoriously bloody; the edges of the undestroyed tissue remain non-absorbent, lessening risk of sepsis; and finally there seems to be some property in the galvanic current to cause a retrogression of the whole of a benign growth, even when but a portion is directly acted on, as in the Apostoli treatment of fibroids and the ordinary treatment of moles and other small skin tumors.

If the growth be a benign one, the application described will probably cover the whole of the active treatment. If it be malignant, on the contrary, the second portion of the method—zinc-amalgam cataphoresis—is employed, a procedure of great value in radically removing all remaining traces of a still localized cancerous growth.

Zinc-amalgam cataphoresis is electrically mono-polar, the single active electrode, which is always positive, being applied to the cavity left by removal of the greater portion of the growth, while the indifferent or negative electrode, in the shape of large conducting pads connected together, is placed on any convenient portion of the body. The active electrode is a freely-amalgamated zinc surface of one or two square centimetres area, which is held successively against all portions of the bottom and edge of the excavation. From 150 to 300 milliamperes are sufficient, the pain being controlled by cocaine in solution placed in the excavation beneath the electrode, to be conveyed into the tissues simultaneously with the nascent oxychloride

of zinc and mercury which is dissolved from the electrode by electrolysis.

By this procedure we search out and destroy all remaining spurs and paths of infection in the contiguous unhealthy and healthy tissues, the current seeking vascular and cellular paths of less resistance by preference in its journey to the other pole; and to the lethal effect of the current we add the well-known lethal effects of nascent mercury and zinc compounds. The surface of the amalgamated zinc electrode is consumed in the process—the mercury as well as the zinc—producing a mixed infiltration of the immediate polar region that is readily detected by the eye. Low organisms in the immediate neighborhood of the electrode quickly succumb, and the anti-septic value of the procedure is shown in the correction of any odors that may have accompanied the cancerous discharge. That the action is not confined to the immediate neighborhood of the electrode was well demonstrated in one case in which the zone-like base of a cancer was observed to lose its induration and shrink in places at least an inch distant from the contact point.

The applicability of the first portion of the method—local electrolysis—to a benign growth was shown in the following case:

Case 1. — Large intra-uterine cystic fibroid destroyed piecemeal by repeated applications of bipolar local electrolysis, resulting in a satisfactory cure.—Mrs. D., a nullipara, aged 39 years, was referred to me by Drs. Hemminger and Bixler, of Carlisle, Pa., in September, 1892. Six or seven years previously Dr. Hemminger had discovered an intra-uterine growth, the lower portion

of which later was found to be projecting from the dilated os, giving rise to pain and hemorrhage. Efforts to remove the growth by the *écraseur* were made by Dr. Hemminger, but, owing to its extensive internal attachment and great vascularity, only the projecting parts were removed. When the case was admitted to the Sanatorium the tumor was nearly the size of the adult head, the upper limit being even with the navel. The mass was symmetrical in shape, soft and semi-fluctuating. Examination showed the os fully dilated, through which projected a portion of the tumor the size of the foetal head. Around this projecting mass several fingers could be swept, showing freedom from adhesion to the uterus for three inches anteriorly and about six inches posteriorly. The mass was evidently a vascular-cystic fibroid situated within the cavity of the uterus and attached to the uterine walls throughout three-quarters of its periphery. It was spongy, but very tough, bled easily and gave rise to a copious watery leucorrhœa. The conditions presented by this growth, particularly its cystic degeneration, absolutely contra-indicated the ordinary Apostoli treatment of fibroids on account of the danger of producing sepsis. I accordingly attempted its removal by morcellation, using the scissors, dull scalpel and fingers, but was compelled to desist, owing to the frightful hemorrhage. In this dilemma the possibility of localized destructive electrolysis occurred to me, and it was begun by the use of a bipolar instrument having four prongs, two to each pole. These prongs were buried in the projecting portion of the tumor, and 700 milliam-

peres turned on for six minutes. This dissolved quite a hole in the morbid tissue, making a spot too hot for the finger. The procedure was repeated daily as fresh portions of the growth were pressed down by the contracting uterus, without hemorrhage or marked discomfort, the possibility of sepsis being guarded against by a continuous douche for an hour or more after each application. Three months were consumed in the eradication of the tumor in this way, though it doubtless could be done in a second case in a third of the time, the final examination showing nothing but a roughened spot on the anterior wall of the contracted uterus. External measurements now showed the upper limit of the uterus two and one-half inches below the navel. The cavity was capacious.

A letter from Dr. Bixler, dated February 26, 1894, stated that the patient was quite restored to health, complaining only of prolapse of the vaginal walls, the latter, doubtless, due to the descent into the pelvis of a uterus that had so long been within the abdomen. The cavity was still large, and there was some thickening of the walls on both the right and left of the uterus. The os would only admit the first joint of the finger.

In November, 1894, two years after the patient's admission, her husband called and reported her as in good health.

Case 2.—Sarcoma of tonsil and soft palate cured by local electrolysis, followed by zinc-amalgam cataphoresis.—W. H. L., blacksmith, aged 38 years, was also referred to me by Dr. Hemminger, February 17, 1893. Five years before he suffered from an abscess of the ear. Two years before being seen by me

the left tonsil was found to be the seat of a tumor. He had recently been sent to the Hospital of the University of Pennsylvania, where, he says, malignancy was diagnosed and an operation proposed, which he declined.

A tumor about the size of a goose-egg filled the pharynx, involving the tonsil and soft palate, and threatening suffocation. Liquids could be swallowed with much difficulty.

The patient was placed on monopolar negative punctures, 30 to 60 milliamperes, daily. But little progress being apparent at the end of a week, the parts were cocaineized and subjected to bipolar local electrolysis with from 200 to 350 milliamperes, on two occasions. The separation of the eschar that resulted was accompanied by considerable pain and reaction, but as the place healed it was found that but little of the tumor remained. He did not return for further treatment until more than a year had elapsed, during which he seemed to be well. At this time, however, a renewal of the growth occurred, and it was about the size of a peach-stone when he was readmitted to the Howard Hospital for further treatment. During this second treatment zinc-amalgam cataphoresis was mainly employed, the treatment lasting six weeks and being carried deeply into the base of the growth. A complete cure resulted, and at an examination of the parts six months later, a healthy scar only was to be seen.

Case 3.—Inoperable carcinoma of the groin greatly relieved by zinc-amalgam cataphoresis; death from erosion of femoral artery and gangrene.—Colonel H., aged 62 years, was sent to me by Dr. A. W. Knox, of Raleigh, N. C., in the summer of 1893. One year before he

had noticed a lump in the left groin. On admission to the Sanatorium the tumor was the size of a large walnut, of a bluish color, and firmly attached by a broad base to the deeper parts of the thigh. It was situated just below Poupart's ligament and lay immediately over the femoral artery and vein, and was apparently attached to the latter, though the exact location of the artery was uncertain, owing to the general induration.

At the patient's request it was decided to make a tentative use of electricity. The central and projecting portion was accordingly destroyed by local electrolysis, making a slight cavity into which a solution of cocaine was poured. Into this the blunt amalgamated zinc electrode was pressed and daily applications of the cataphoresis made, with currents averaging 150 milliamperes. The immediate effect of the application was to whiten the edge of the growth in contact with the electrode, the whitened coating peeling off later. The indurated ring and base that now represented the growth was about three inches wide. Under constant applications the whole of this was gradually destroyed and replaced by healthy granulations, except the centre of the base, where the close proximity of the large artery rendered the applications unwise. At the end of three months the diseased area had been contracted to the size of a five-cent piece, but this was a deep cavity extending down to the great vessels, where it was thought to be unsafe to apply the current. The patient had increased twenty pounds in weight, and, though brought to the Sanatorium on a stretcher, was now able to walk a half mile or more.

During the continuance of this improved condition, however, the artery suddenly gave way one day at the bottom of the untreated spot. Drs. Thomas S. K. and T. G. Morton were called in and tied both artery and vein, which were found thoroughly infiltrated with cancerous material for some distance upward into the abdomen. Gangrene of the limb supervened, followed by death two weeks later.

An estimate of the value of the method in these three cases must be comparative, as cases similar to each are usually subjected to other methods, removal with the knife being the favorite. Hysterectomy in the first case would, of course, have involved removal of the ovaries also. Both this and removal of the uterus itself were avoided entirely, no natural structures being even injured, and the time required in the treatment was probably not longer than that necessary to recovery from the effects of abdominal section. In the second case the bloodless removal of a sarcoma of the palate was followed by a treatment that I hope will render the patient less liable to a return of the disease. The third case was, of course, a failure to cure or to preserve life, yet it is thought that life was prolonged by the very evident curtailment of the growth and improvement of health. Comparisons were hardly possible, however, as an operation had been refused by one surgeon as useless.

THE CHARCOT MONUMENT FUND.—The sum of the contributions to the Charcot Monument Fund thus far received by the American Committee is \$642.

A SEVERE TEAR OF THE NASAL SEPTUM.

BY W. C. ASHWORTH, M.D., Kernersville, N. C.

That the country doctor must be a man of utilitarian ideas is abundantly proved by the following case. He must utilize and improvise to no small degree.

R. M., aged 17 years, was returning home in a wagon when the horse began to kick, and in doing so struck a board in the hands of the driver, which was driven backward, striking the lad on the bridge of the nose. On examination a severe tear of the nasal septum was discovered. The mucous membrane of the nose was actually stripped up for at least one-half inch.

After not a little effort we succeeded in drawing the displaced Schneiderian membrane downward in apposition with the raw surface below. Having succeeded in this, the question naturally arose, How can it be best held in that position? Suturing was first thought of, but the displaced mem-

brane was entirely too frail to hope for success by this procedure. Not having access to an instrument shop where we could procure ivory or vulcanite plugs as retentive apparatus, we decided to utilize a large size rubber catheter. Two plugs, about two inches in length, were accordingly cut off and sterilized for introduction.

We experienced much difficulty in introducing them through the posterior nares, but when once introduced answered the purpose admirably.

A suture was passed through their ends, which were allowed to project about one-half inch from the nasal openings; we then passed it up on the forehead, where it was firmly bound down by adhesive plaster.

The case, in every way, seems to be doing well.

I was rendered valuable service by Dr. H. T. Bahnson, of Salem.

Selected Papers.

REMARKS ON THE HYGIENE OF CHILDREN.*

BY J. P. CROZIER GRIFFITH, M.D., Clinical Professor of Diseases of Children in the University of Pennsylvania, and Professor of Clinical Medicine in the Philadelphia Polyclinic.

Although there are several matters connected with the hygiene of infancy to which I wish to refer, the principal one among them relates to the preparation of the infant's food, and, being chief, may be considered first.

It is admitted by nearly all writers that the object aimed at in the feeding of infants upon artificially prepared food should be to produce a milk which resembles human milk chemically, as far as it is possible to attain this end. With this in view, analyses of various milks have repeatedly been

*Read before the College of Physicians, Philadelphia, February 6, 1895.

made in order to determine the relative proportions of the chief constituents—albuminoids, fat, sugar, water and salts. Analyses of human milk are somewhat at variance. Those of Leeds would give the albuminoids as equaling 2 per cent. Those of Meigs, Harrington and Biedert, on the other hand, place it at 1 per cent. Adopting the latter percentage as the result of the more recent investigations, and as sustained by the greater number of authorities we may formulate the composition of woman's milk as follows (Rotch):

Reaction . . .	alkaline.
Bacteria . . .	none.
Water . . .	87-88 per cent.
Total solids . .	12-13 "
Fat . . .	4 "
Albuminoids . .	1 "
Milk sugar . . .	7 "
Ash . . .	0.2 "

While there are several species of animals whose milk may be used to replace human milk, none of them produce a secretion which is sufficiently like that of woman to permit of its use without previous preparation. Consequently none of them present any especial advantage over cow's milk, which certainly offers the most convenient basis upon which to construct an artificial human milk. The analyses of cow's milk, as ordinarily accepted, place its ingredients in about the following proportions (Rotch):

Reaction . . .	acid.
Bacteria . . .	present.
Water . . .	86-87 per cent.
Total solids . .	13-14 "
Fat . . .	4 "
Albuminoids . .	4 "
Milk sugar . . .	4.5 "
Ash . . .	0.7 "

This applies, of course, to the average

herd milk. Certain breeds of cows, and, still more, individual cows give a milk which varies from the standard. It is the albuminoids of cow's milk, and especially the caseine constituting the greatest proportion of these, which give the baby so much trouble to digest. There are undoubted chemical differences in the caseine of the two sorts of milk, and these often cause difficulties which we are unable to overcome by any method of dilution or preparation. The mere matter of quantity of the different ingredients, however, we are able to manage. If we compare the two tables given we notice that cow's milk, as contrasted with woman's milk, is much too rich in albuminoids, contains the same percentage of fat, has nearly twice as much sugar and is slightly richer in ash. It is evident that by diluting cow's milk sufficiently we can reduce the albuminoids to the proper amount. It is also evident, however, that in so doing we diminish too greatly the amount of sugar and of fat. Our work, therefore, is clearly cut out for us, and consists in diluting cow's milk sufficiently to reduce the albuminoids to the proper percentage when the preparation is completed, and then in adding cream and sugar in sufficient amount to make up for the loss of these ingredients.

As regards the sort of sugar to be used, milk-sugar is that naturally present in milk, and it certainly seems rational, therefore, to employ it. It is possible that cane-sugar may answer just as well; and, indeed, in the case of some children, it seems to agree better; but these are only the exceptions. We should certainly try by the use of milk-sugar to approach as nearly as possible to the character of human

milk. With regard to cream, it is evident that its richness must determine the amount to be employed. Ordinary skimmed cream consists of 16 per cent. fat, while the thinner centrifugal cream contains about 20 per cent. fat. In constructing any milk mixture the character of the cream must be borne in mind, and the proportion varied accordingly. Finally, cow's milk, as it reaches the consumer, is very commonly acid, and contains bacteria, while human milk is alkaline and is free, or practically free, from bacteria. The destruction of the bacteria is to be accomplished by sterilizing or some similar process. For the removal of the acidity the addition of lime-water is very commonly employed, but a solution of soda is greatly to be preferred for several reasons. There are several objections to lime-water, and it is on account of these that, with these introductory remarks, I wish to recommend the following formula, which gives a milk corresponding, as far as possible, to human milk:

Milk Mixture.

Milk	2 ounce.
Cream (skimmed, 16 p. c. fat)	2 ounces.
or	
Cream (centrifugal, 20 p. c. fat)	1½ "
Soda-solution	½ ounce.
Milk-sugar	1 measure.
Water, enough to make	8 ounces.

This formula is a modification of one given by Dr. Rotch, which again was based upon one by Dr. Meigs, and that, I presume, a modification of previously existing ones. The Meigs mixture, as is well-known, contains "sugar-water," a solution of milk-sugar in water of a calculated strength.

As the author himself admits, this solution has to be made fresh every few days, since it will not keep. To obviate this difficulty Dr. Rotch used a little measure, and measured out the amount of sugar—three and three-eighths drachms—required for each eight ounces of milk mixture.

The soda solution is made of the strength of one grain of bicarbonate of soda to the one-half ounce of water. Analyses kindly made for me under the supervision of Dr. Marshall, of the University of Pennsylvania, show that the amount of this salt of soda, equivalent in alkalinity to a half-ounce of ordinary lime-water, equals very nearly one grain. A dozen packages of bicarbonate of soda, each containing one drachm, may be obtained from the druggist at very slight cost. One of these dissolved in a quart of water makes a solution of the proper strength. As the dozen packages are sufficient to alkaline 768 eight-ounce bottles of the milk-mixture, and as the soda solution will keep indefinitely, it is readily seen that the use of the solution is both cheap and simple.

We may now consider some of the reasons why a soda solution is decidedly to be preferred to lime-water. In the first place, it is a mistaken idea that lime must be added to the food for the sake of the lime salts required for the baby. Cow's milk, as the tables show, is decidedly richer than woman's milk in mineral matter, including lime, and its dilution does not reduce the salts below the proper amount. The sole object of the lime-water is to render the mixture alkaline, and soda does this just as well. I hasten to say that the use of soda is in no way original with me. Dr. Jacobi,

for one, long ago sanctioned it. Another objection to the lime-water is, that when added to milk in the quantity sometimes advised, its taste is quite evident and may be unpleasant to the baby. Another count against it is that when the milk mixture is heated a chemical reaction takes place between the sugar and the lime and a brownish color is produced. This is perhaps only an objection on an esthetic ground, but there seems no good reason for producing the offending color unless it is necessary. A fourth and more vital objection is that when the milk mixture is sterilized after lime-water has been added, the lime is precipitated in large measure, and the desired alkalinity is reduced or destroyed.

Finally, in the effort to overcome the latter objection, the difficulties of sterilizing are largely increased. It has been proposed, for instance, that the milk, water, sugar and cream be mixed in the proper proportions and sterilized, and that the lime-water then be added. We can only do this with safety however, just before the mixture is to be used, since an earlier removal of the cotton plug allows germs to enter. Consequently, the proper amount of lime-water must be added to each bottle when the child is about to be fed. With the varying amounts of nourishment which the baby takes at different ages it is evident that the calculation of just how much lime-water is to be added on each occasion is a matter not altogether simple. It will certainly seem to the mother to add greatly to the trouble in using sterilized milk; and it must be our object to make the process as easy as possible.

With regard to the amount of cream to be employed, the formula given allows a certain latitude, since the cream is a variable substance. In using the mixture the whole amount needed for the twenty-four hours should be prepared in the morning when the milk arrives, the proper amount placed in each bottle according to the age of the child, and the bottles placed in the sterilizer and heated to the degree of temperature desired.

With regard to the practice of sterilizing, it is undoubtedly true that the process often in some way makes the caseine more difficult to digest. On this account Pasteurizing has been proposed to take its place, as it does not materially alter the digestibility. The studies of Koplit and others show, however, that Pasteurizing, in the strict sense of the term, i. e., heating to 75° C. (167° F.), is not a safe method to be intrusted to mothers, since it does not satisfactorily kill the germs, which will develop in less than twenty-four hours. On this account a modified sterilizing is to be preferred. If the sterilizer is employed with the hood removed and the lid set slightly ajar and a brisk but not too hot fire is employed for about forty-five minutes, the temperature of the milk does not go above 80° or 90° C.—a temperature which does not materially affect the digestibility of the milk, yet which is sufficient to render the milk practically safe for twenty-four hours. I have myself tested the milk with the thermometer while it was being heated in this way.

Where predigestion of the food is to be combined with sterilizing, as is very often necessary in cases of illness, we may employ the following formula:

Sterilized Peptonized Milk Mixture.

Water 8 ounces.
 One-half of a pepton-
 izing tube,
 or
 One peptonizing tablet.
 Dissolve.
 Add milk 8 ounces.
 Peptonize.
 Then use—
 Peptonized milk . . . 2 ounces.
 Cream 1½ to 2 ounces.
 Milk-sugar 1 measure.
 Water enough to make 8 ounces.
 Sterilize as already described.

This formula contains the same proportions as the preceding one, with the exception of the soda, which is increased in amount. No soda solution need be added, since the soda in the peptonizing powders or tablets more than takes its place.

In concluding my remarks upon feeding, I beg leave to exhibit this food-warmer, which will be found very convenient, and which is not as widely known as it deserves. When a baby wakes in the night crying for its bottle, the tedious warming of the milk to the proper temperature is, to say the least, a dreary process. This food-warmer, called the Penniston, consists practically of a hot-water bag with an outside pocket. One or more bottles of prepared milk, sterilized and corked, may be placed in the pocket on retiring, the compartment for water filled, and the whole covered with a woollen cloth.

The bottles are thus kept ready for immediate use.—*University Medical Magazine*.

A HINT IN PRESCRIBING.—Now that the price of empty capsules has become so greatly reduced that they are within the reach of all, even the country prac-

titioner, they should, seemingly, form as much a part of the *armamentarium therapeuticum* of the physician as the pocket-case or hypodermic syringe. Why cause patients to swallow a bitter pill in the form of a compressed tablet or tablet triturate, when the taste of such may be effectually masked by enclosing in the popular gelatin capsule? The disguising of the taste, moreover, entails no sacrifice of speedy efficacy, as the gelatin dissolves quickly and exposes its contents to the action of the stomach.—*Therapeutic Notes*.

USTILAGO MAYDIS DURING LABOR.—Excellent results are obtained by the administration of the fluid extract *Ustilago maydis* in cases of primitive inertia of the uterus. The contractions appear twenty-five to thirty minutes, forty at the most, after the drug has been ingested, and are physiological, there being no convulsive or tetanic character about them. There is no contraction of the cervix, and the drug can be given without danger at no matter what time during labor, acting even better when dilatation is already obtained at the time of inertia. Delivery and the expulsion of the placenta are in no way delayed or prevented. No bad results accrue either to mother or child. This drug has been employed in Germany and America for twenty years, and in obstetrical practice is far superior to ergot.—DR. V. S. GROMSDEFF, in *Vratch*.

VALERIANATE OF AMYL.—A writer in the *Med. Record* says that in 2½ grain capsules every half hour, up to 5 or 6 doses, this agent will relieve the pain of nephritic colic or of cystitis, though it has no influence on the calculus.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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This JOURNAL is published on the fifth and twentieth of each month, and any subscriber failing to receive his copy promptly, is asked to announce the fact to this office.

Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

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Editorial.

SOCIETY NOTES.

As the time for the annual meeting of the State Society draws nearer, there is more and more evidence that it will be thoroughly successful and satisfactory. A goodly number of papers upon varied topics have been announced, and there will doubtless be a number of others presented but not appearing upon the program.

It is high time that all papers intended for competition for the two prizes were in the hands of the respective committees, but for the benefit of those who may have papers to present we give the committees below:

Duffy Prize—Dr. R. L. Payne, Lexington; Dr. A. W. Knox, Raleigh; Dr. A. Cheatham, Durham.

North Carolina Medical Journal Prize.

—Dr. W. P. Beall, Greensboro; Dr. R. L. Gibbon, Charlotte; Dr. W. H. H. Cobb, Goldsboro.

Among the committees to report at the coming meeting is the one appointed to consider the advisability of establishing the office of Permanent Secretary, or, as we prefer to designate the suggested office, Librarian. We hope the committee has given the matter some thought, for it is really one of importance. The Society has no library and no effects save what the Secretary lugs about with him at the annual meetings, and it will never have one until provision for caring for it be made. Transactions from other societies are received by the Secretary, but they are always left in the hands

of the retiring Secretary. The library of the Society would receive many of the best periodicals free and would also have many valuable volumes presented, and in the course of a few years would be of great value to members of the Society. The articles appearing in the various society transactions could be indexed and the leading periodicals kept on file, so that they would be accessible to members who might desire to refer to them in the preparation of a paper. We hope to see the office established at once.

The plan of allowing each chairman of a section to appoint two or three others as assistants to read papers in his section has worked well so far, and provides a better variety of papers. The Constitution provides that these appointments be confined to members of the Society, or those who intend becoming members at the meeting at which they are invited to read papers.

Those gentlemen who are appointed by the President as chairmen of sec-

tions should remember that the appointment is not an empty honor, but that something is expected of them. They should employ in the preparation of their essays great diligence and care, remembering their essays should be of interest to the many men of experience who will be present to hear them. And they should study their subjects so thoroughly that they will be able to enter into the discussion which is almost sure to follow a very good paper.

For the information of those who may desire to connect themselves with the Society, we will state that to become a member it is necessary to be present in person and sign the Constitution. The Society desires to have upon its roll all regular physicians in the State who are in good standing. The time is rapidly coming when a physician cannot afford to stand aloof from the Society, and we hope that this meeting will see a large number added to the roll.

Reviews and Book Notices.

Surgical Pathology and Therapeutics. By John Collins Warren, M.D., Professor of Surgery in Harvard University; Surgeon to the Massachusetts General Hospital. Illustrated. W. B. Saunders, Philadelphia. Price, cloth, \$6.00; one-half morocco \$7.00. By subscription only.

In his preface the author says: "The scientific portion of a surgical education was formerly regarded as something apart and ornamental, but it has now become an eminently practical feature of the student's curriculum." We find all the leading colleges now

provided with laboratories and a practical course in Pathology and Bacteriology is one of the special requirements for graduation in the best colleges.

Physicians who graduated as long ago as eight or ten years, and even four or five years in some of the colleges, feel the lack of this scientific training, and it is for the especial use of these that our author has prepared this most excellent volume. The first two hundred and eighteen pages are

devoted to a study of bacteriology, hyperæmia, simple and infective inflammation and the process of repair. This department is alone worth the full price of the work to one who would acquaint himself with this all-important subject. It is thoroughly illustrated in colors and full instruction is given in the details of laboratory work, such as the preparation of different forms of media, cutting and mounting sections, staining, the use of the microscope, etc., in a style which is delightfully attractive and easily comprehended.

The chapters on shock, fever, septicæmia and gangrene deserve especial attention. The section devoted to a study of tumors, carcinoma, sarcoma and benign tumors, comprises about one hundred and fifty pages. An appendix gives briefly a description of blood-serum therapy and the methods of preparing erysipelas toxine as used by Dr. William B. Coley.

The volume is a highly satisfactory work and should be in the hands of all who desire a clear, concise and up-to-date treatise on surgical pathology and therapeutics.

Dose-Book and Manual of Prescription-Writing, with a List of the Official Drugs and Preparations, and also many of the newer remedies now frequently used, with their doses. By E. Q. Thornton, M.D., Ph.D., Demonstrator of Therapeutics, Jefferson Medical College of Philadelphia, etc. Pages 334. Price \$1.25. W. B. Saunders, Philadelphia.

This work is intended as an aid to the student of medicine, both during his years of study as an undergraduate and in the early period of his professional career. The metric system of weight and measure is carefully explained and illustrated by diagrams.

Part II. gives rules for prescription-writing, including tables of nouns arranged according to their declension, and verbs according to their conjugation, with rules for the proper application of these in writing prescriptions. Under Part III., Official Preparations and Methods of Prescribing, will be found many useful hints, which will be of service, not only to the beginner, but to those of more experience, who would acquaint themselves with the many elegancies in the administration of remedies that are being constantly brought out. The volume closes with a list of official and officinal drugs and preparations. An appendix is supplied giving a list of questions for the self-examination of students.

It is one of Saunders' New Aid Series.

Report of the North Carolina Institution for the Deaf and Dumb and Blind, from December 1, 1892, to November 30, 1894.

This is the report of the President of the Board of Trustees to the Governor at the late session of the General Assembly. It sets forth the work of the Institution during the last two years, and tells the needs for carrying on the work. According to the report there were in the State in 1890, 1,592 blind persons, of whom some 550 are estimated to come within the school age, and yet at the time of the report there were only about 130 attending school. There is crying need for more accommodation at the Institution, but there is still more crying need for laws which can and will reduce the number of blind persons, by protecting the new-born from the destructive effects of ophthalmia neonatorum.

Asepsis and Antiseptics. By Chas. Milton Buchannon, M.D., Professor of Chemistry, Toxicology and Metallurgy, National University, Washington, D. C. With an Introduction by Professor Augustus C. Bernays. The Terhune Co., Newark, N. J., 1895.

This little volume gives the history of antiseptic surgery, its results, the various antiseptics used, methods of preparing the patient, instruments and dressings for an operation and the an-

tiseptics as used by the leading surgeons of the country. It is interesting to note that, while the list of drugs that are classed as antiseptics reaches the very respectable number of two hundred and more, in the reports from surgeons giving the antiseptics favored, very few mention anything other than carbolic acid and mercuric chloride, while nearly all mention moist heat!

Abstracts.

PERNICIOUS ANÆMIA.—Chas. T. W. Hirsch (*The Lancet*). In a report of one hundred and twenty-six cases, treated in the Rewa district, 1893, the writer states that forty-one cases died, thirty-four were returned to India as chronic invalids, twenty-five are still undergoing treatment. The remaining twenty-six have returned to work, though a considerable number are still weak. Of these cases ninety-eight were males and twenty-eight females, this preponderance of males probably being partially due to the fact that more male than female immigrants are introduced. In one hundred and ten cases the first symptoms noticed were those of gastric disturbance and slight diarrhœa. In ninety-four cases slight icterus was present. In all the anæmia was most intense.

Hemorrhages did not seem as common as would be inferred from the text-books. Four cases had metrorrhagia and eight showed signs of hemorrhage. In twenty occasional melæna was present. Dropsy occurred

in fifty-one cases. General anasarca, ascites and pulmonary œdema were common precursors of death. The urine was very dark in color. Blood-pigment was present in five cases, but no red blood-corpuscles were noticed. The blood in the cases examined showed microcytes and poikilocytes, leucocytosis and a quite marked reduction in the hæmoglobin. In the cases attended with diarrhœa the ova of the ankylostoma duodenale were frequently seen. In seven cases in which male fern had been given specimens of the ankylostoma were present in the stools.

A nitrogenous diet seemed to cause diarrhœa. A farinaceous diet with milk and cocoa, and consisting chiefly of sago or arrow-root, with bread and milk and roasted taro seemed most suitable.

Spirits with extras, such as eggs, formed useful additions to the diet. Arsenic was the most useful drug. It seemed to be better borne by the patients when taken in conjunction with

five grains of salol three times a day. Diarrhœa was best treated with intestinal antiseptics.

In the autopsies of twenty-six fatal cases the noticeable points were general pallor of all the organs and fatty changes in a large number of them. The heart showed the most marked fatty changes. In many cases the papillary muscles showed the "tabby-cat" situation. The liver was invariably large and pigmented. In seven cases the spleen was swollen and pulpy. In one case in which the suprarenals showed changes there were scattered tubercles in the lungs. In all other cases the suprarenals were normal.

The stomach was normal in all but four cases, in which it was much congested. The intestines in two cases showed signs of ulceration. In eighteen cases the ankylostoma was found in the duodenum. The blood-vessels were apparently healthy. In two instances the marrow of the long bones was excessively red and showed irregularly-shaped corpuscular elements.

The writer hopes to make a more complete and definite report later.—*Int. Med. Mag.*

THE MURPHY BUTTON IN INTESTINAL ANASTOMOSIS.—Dr. John B. Murphy (*Chicago Clin. Rev.*), in an analysis of all the cases to date treated with the Murphy button, draws the following conclusions:

1. The cicatrix produced with the button does not contract.

2. Size No. 1 ($\frac{3}{4}$ inch or .02 m.), or No. 2 (13-16 inch, or .022 m.) should be used for cholecystenterostomy.

3. End-to-end, side-to-side and end-to-side of the small intestines should

be made with button No. 3 (15-16 inch, or .025 m. in diameter).

4. End-to-end and side-to-side of large intestine should be made with button No. 4 (1 inch, or .026 m. in diameter).

5. A special large size ($1\frac{1}{4}$ inch, or .029 m. in diameter), with a long male cylinder, may be used in some cases of resection of the rectum with advantage, but it should not be used unless it fits loosely.

6. In intestinal obstruction resection with end-to-end union gives better results than lateral approximation, and should always be performed where practicable. The same operation should always be done in gangrenous hernia. In fecal fistula the bowel should be resected and united end-to-end.

7. The patients should receive liquid nourishment as soon as the effect of the anesthetic passes off. The bowels should be made to move as soon as possible after the operation, and frequent evacuations kept up.

8. If the button does not pass in three or four weeks, the rectum should be examined, as it may rest just inside the sphincter.

9. There has been one case reported of occlusion of the button by fecal impaction in the cylinder. This can be easily avoided by a mild cathartic immediately after operation.

10. When returning the intestines to the abdomen, they should be placed in parallel lines, especially at seat of approximation, to prevent sharp curves and obstructions. This occurred once with the button; many are reported following suture.

11. There is no danger from obstruction from the button, as not a single

case has been reported. This proves that the deductions made by Chaput, of Paris, from experiments on the cadaver, are erroneous.

12. There is no danger of extension of the pressure atrophy beyond the line of pressure.

13. Primary adhesion may be hastened in malignant cases by abrading the peritoneum with a needle. It is unnecessary in non-malignant cases.

14. A supporting suture is never necessary to secure union, and should only be used to relieve tension when the viscera approximated are forced out of position.

15. The mucous membrane should be pushed down in the cup of the button before closing it; if redundant, it should be trimmed off with scissors. It should never be allowed to protrude between the edges of the button when the button is closed.

16. While the button is easily inserted, the pathological condition requiring the operation may demand the greatest surgical skill to secure a favorable result.

17. The following points regarding the construction of the button should be noted before using it:

a. The spring catches should hold firmly in all positions, and should be made of a metal that will not be corroded by acids.

b. The elastic pressure-cup should be on the male half of the button (never on the female).

c. The edges of the pressure-surfaces should be very smooth and hemispherical in shape.

d. The spring under the pressure-cup should not be too strong.

e. There have been defective buttons on the market. The following firms

are at present manufacturing perfect buttons: J. J. Ryan & Co., Chicago; Truax, Greene & Co., Chicago; Geo. Tiemann & Co., New York; W. F. Ford & Co., New York; Down Bros., London, Eng.; Sharp & Smith, Chicago; Frank Kratzmueller & Co., Chicago.

18. If the button appears at the opening of the fistula after lateral approximation, do not try to force it through the opening; it is unsurgical; open the abdomen and (a) press it back to the anastomotic opening and through it on down the intestine, and it will pass; or (b) make a longitudinal incision in the bowel and take it out.—*Amer. Medico-Surg. Jour.*

McBURNIE'S NEW METHOD OF INCISION IN THE ABDOMINAL WALL IN CASES OF APPENDICITIS.—J. E. Summers, Jr. (*Kansas City Medical Index*). It is a well-known fact that hernia is apt to follow any one of the usual incisions for any one of the varieties of appendicitis, and if by improvement of technique this tendency to hernia can be lessened or overcome, another advance will have been made toward coping successfully with this murderous disease. Dr. McBurnie describes his new incision briefly as follows: An oblique incision in the skin, about four inches long, is made in the usual position and about one inch from the iliac spine. The external oblique muscle and aponeurosis are divided in the same line, not cutting any fibers across. After retracting the edges of the wound strongly, the internal oblique muscle is seen, the fibers of which cross somewhat obliquely the wound already made. With a blunt instrument, such as Kocher's director, the

fibers of the internal oblique and transversalis muscles can be separated without cutting more than an occasional fiber, in a line parallel with their course—this is nearly at right angles to the incision in the external oblique aponeurosis. The transversalis fascia and peritoneum are then divided. McBurney states that the drawback to this method of operating depends upon the absolute necessity for two pairs of retractors, the one for the first incision, the other for the opening made beneath and at right angles to it. He does not think it especially suitable for suppurating cases because of the somewhat limited space. He says: "It is not an easy operation, and should not be attempted by those who are unfamiliar with operations upon the appendix, and I again call attention to the fact that in performing it two extra assistants will be occupied part of the time with retractors." He has done the operation four times. Last July I did this operation, twice having learned of it before its inventor's paper appeared. The first case was upon an adult, the second a child three years of age; both recovered with strong cicatrices; and, although I operated for appendicitis a number of times during this period and since, yet the cases were not suitable for the incision.

In thus calling attention to this improved operation in selected cases, I desire to state that the number of retractors can be reduced to two, and only one extra assistant required, if so soon as the first incision is made two temporary sutures are introduced through the edges of the wound, about its middle, and each introduced, tightened and tied—the one through the skin over the left rectus muscle, the

other in the same line through the skin covering the right gluteus maximus muscle. This causes wide separation of the edges of the incision and does away with the inconvenience of the hands and retractors of an extra assistant. The wound is closed, of course, from the bottom, by layers of buried sutures, and thus "it will be seen that the gridiron-like arrangement of the muscular and tendinous fibers, to which the abdominal wall largely owes its strength, is restored almost as completely as if no operation had been done." I believe this operation suitable in most all forms of appendicitis if done early and before too extensive changes have taken place, requiring a very large opening for inspection and manipulation.—*Mathews' Medical Quarterly*.

PROSPECTS OF SERO-THERAPY.—The future of the serum-therapy in several infectious diseases is secured beyond peradventure. We may have been too enthusiastic and may have expected more than we can now obtain, perhaps; and possibly the enthusiasts may be painfully disappointed in their hopes for immediate wonders from the sero-therapy in diphtheria, tetanus, etc., but the fact will always remain that this system is unquestionably rational, and eventually it must yield success in therapeutics where all else must fail, for it is the one rational, truly physiological treatment—the only treatment, in my humble judgment, from which can be derived positive beneficial results in the cure of infections. It is Nature's own remedy. Man, with the serum, is using Nature's own weapon of defense; he has found out how he may add power to the natural resources

of the organization in the fight for human existence. This system of treatment is not a spontaneous eruption in therapeutics. It is not an explosion in over-zealous laboratory delvers, with more theory than experience; it is the result of years of research in all the laboratories and in the chief clinics of the civilized world, particularly France and Germany. And it is not only yesterday that it appeared in practice. It was several years ago that Kitasato applied his antitoxine satisfactorily against tetanus. Diphtheria had been treated successfully for a year or more. Syphilis is now treated experimentally with it; and lastly, your humble servant begs to submit to your indulgent criticism the result of his meagre labors conducted under extreme difficulties (without state or financial aid, that is, when these were most needed), particularly during the applications and experiments of the last two years. The future of sero-therapy in tuberculosis is, in my mind, very bright and very promising. The first and second stages have been benefited under unfavorable circumstances, by only slightly immunized serum. Consequently it is only fair to reason that with more strongly immunized serum, such as is now ready to use (I have only a limited quantity), much better and quicker results can be obtained, particularly if better hygiene and dietetic conditions obtain.—*Amer. Therp.*

"INTRA PARENCHYMATOUS INJECTIONS OF ALCOHOL IN THE TREATMENT OF INOPERABLE CASES OF CANCER OF THE UTERUS." Vulliet (*Nouv. Arch. d'Obstet. et de Gynec.*, October, 1894.) There can be no question of

the great progress in the treatment of cancer of the uterus marked by the establishment of the operation of vaginal hysterectomy. The operation, nevertheless, saves only a very small proportion of cases. Uterine cancer is discovered too late; there is nothing to draw attention to it in its early stages. In the great majority of cases the disease is too far advanced for radical operation when it is seen for the first time by the physician. Palliative treatment of cancer of the uterus, therefore, becomes one of the most important problems of gynecology.

The use of the curette, cauterization, antiseptic and deodorizing medicaments and hæmostatics, have wrought a great change in favor of the sufferers from incurable cancer. The methods advocated by the author and by others probably mark a still further advance. Vulliet divides the cases into two groups: 1. The cases in which the cancer is so far advanced that it is useless to attempt extirpation by hysterectomy. 2. The cases in which hysterectomy has been performed, and there is reason to believe that the neighboring tissues are already involved or a recurrence has actually taken place.

The method of treatment consists in injecting absolute alcohol into the "parenchyma of the neoplasm" and of the surrounding tissues. Vulliet says that he began to practise his method in 1891, but he was anticipated in publication by H. Schulz, of Budapest, in 1892.

There are four cases reported, and all of them had been declared inoperable before they came under the care of Vulliet. In three out of the four there were difficulties in the way of

continuous treatment. The first case was that of a woman of 41. She had been seen ten years before, and had been then advised to undergo Emmet's operation on account of a deep laceration of the cervix, but declined to have any operation. She had then been treated by other medical men with caustics. In June, 1891, she began to have abundant irregular hemorrhages. In September she consulted a specialist, who expressed regret that she had not come to him earlier. He scraped the uterus, and two months later the discharge returned. In May, 1892, she began to suffer from lancinating pains. After being under treatment in several places, she returned to Geneva, and was afterwards continuously under the care of Vulliet. Her condition before the treatment was begun is thus described: "The lips of the uterus have disappered; the ulceration has produced a crater of which the opening encroaches upon the vagina, especially on the left side. The parametrium on the same side is engorged and hard, and the hardness extends laterally the whole depth of the broad ligament. The ulceration is an inch deep, and there is abundant hemorrhage from it on the slightest touch."

The treatment was begun by two injections a week, and the ulceration soon became arrested. There was a sort of general retraction of the tissues, and the parts took a healthier aspect. About the beginning of August the first sign of genuine cicatrization was seen. It appeared on the margin of the ulcer posteriorly. There was then such rapid improvement that it was thought feasible to extirpate the uterus by abdominal section, or at least to remove the appendages, so as to put

an end to the menstruation, which was profuse and painful. The operation was attempted in the end of August, and ended with removal of the ovaries only; the uterus could be neither raised nor depressed.

Treatment by injection of alcohol was soon resumed and cicatrization went on rapidly to completion.

The treatment which showed itself efficacious as to the symptoms of hemorrhage and sanious discharge has no effect on the pain. It is necessary to have recourse to sedatives as the cicatrization proceeds.

Vulliet gives the details of three other cases rather less satisfactory, and remarks on the special features of each.

As to the technique, details are given very fully. The field of operation is thoroughly cleansed by a solution of soda, followed by the use of sublimate solution 1:1000. The patient is placed in the genu-pectoral position the better to expose the parts. As a rule, an anesthetic is not required. Three or four hypodermic syringes filled with absolute alcohol are held in readiness. The first injection is made into the centre of the neoplasm. In schirrus the fluid penetrates at once into the firm substances; in soft cancer it may enter friable material and not be retained. In such a case it is necessary to push on the syringe till it touches the more solid base of the growth. Only three or four drops of the alcohol are injected at any one spot. When the injection with the first needle is completed, the syringe is not withdrawn, but the proceeding is repeated in another portion of the tumor with a second syringe, and so on. The object of leaving the syringes is to prevent the reflux of the alcohol which occurs

when the needle is withdrawn immediately. When the patient is not sensitive from nine to a dozen injections are effected at a sitting, proceeding from the centre towards the periphery. The last circle of injections is made in the apparently healthy tissue which surrounds the ulcerated part.

The injections are for the most part well borne, especially at the beginning of the treatment, and according to Vulliet there appears to be no reason why the treatment should not be carried on in the consulting room or the outpatient department of a hospital. In nervous subjects and those weakened by loss of blood and deranged by the use of morpine it is occasionally necessary to administer an anesthetic so as to permit of effective treatment. The number of injections in such subjects may also be greatly diminished.

Among the phenomena observed when the fluid was injected was a change in the color of the tissues. Immediately after the injection of the alcohol into the parenchyma all the zone of the tissue of which the puncture was the centre became suddenly of a greyish white color as if it had been injected by a liquid of that color. Whatever may be the cause of this change it proves the immediate diffusion of the liquid in the parenchyma over a space which often measures more than a centimetre in diameter.

On two occasions the injections were immediately followed by disagreeable sensations through the whole body, but especially in the hands. One patient said she felt as if she had quicksilver circulating in her veins. She very soon recovered, and without any apparent bad effects.

The author says he as employed

these "instillations" for a sufficiently long time to convince him that the method is complete and capable of giving as good results as can be obtained by any other palliative treatment of cancer of the uterus. He has not found any advantage in supplementing the method by any other measures, and he has not seen any good from the use of other substances in solution in the alcohol. This last declaration may be considered as a reference especially to the treatment of H. Schulz, who employs a solution of salicylic acid.

In some exceptional cases Vulliet recommends the use of the blunt curette. When by the action of the alcohol the deep-lying tissues become harder there remains on the surface a thin layer of tissue, which neither disappears nor becomes hard, nor organizes into a cicatrix. It may be advisable to use the blunt curette to clear away only loose tissue. He occasionally follows this up by touching with zinc chloride or the thermo-cautery. "The curette and cauterization acting on the surface, and the injections in the depth of the tissue, the cancerous elements find themselves caught between them"!—*Med. Chron.*

FISTULA IN ANO.—In doing a radical operation for fistula the following points, according to Dr. J. H. Bacon, should be observed:

1. Never sever the sphincters at more than one place at the same operation, no matter what the complications may be, otherwise incontinence is sure to follow.

2. Unless all the channels are followed up and laid open the operation will fail of its purpose.

3. Fistula resulting from tubercular abscess must not be operated upon if there is sufficient tissue destruction of lung to produce hectic fever, sweats, etc., unless the fistula is causing severe painful spasms of the sphincters, then it should be divided at any stage.

4. After laying the fistula tract open the wound must be made to heal from the bottom, and as the cutaneous or mucous side of the wound is better nourished it will throw out a more healthy granulation, that tends to bridge over and close the slower granular surface at the bottom, thus leaving a fistula remaining.

5. When the fistulous tract is not too complicated it should be dissected out entire and the wound brought together, beginning at the bottom with continuous catgut sutures and approximating the surfaces in successive layers until the whole would be closed.—*Northw. Med. Jour.*

ARE THE UTERINE ENDS OF THE FALLOPIAN TUBES EVER PERVIOUS WHEN THE TUBES CONTAIN PUS.—Notwithstanding the recent emphatic declaration of one of our most noted gynecologists to the contrary, numerous cases in which tubes are pervious are being reported. Dr. T. J. Watkins, of Chicago, says that while separating the adhesions of a pus tube on left side he noticed that the tumor suddenly decreased in size without rupture. Fully four drachms of pus were forced out through the uterus into the vagina, over the vulva, and onto the operating table. He thinks that this case, however, could not have been relieved by curettement, drainage, massage or galvanism, because, first, the patient had an abscess of the opposite

tube and ovary, and, second, because the walls of the left tube were so distended, adherent and thickened as to be incurable by any operation short of an abdominal section.

Dr. F. A. Glasgow, of St. Louis, practices dilating the cervix with sterilized elm tents in these cases, saying, "we can gradually slip in tent after tent, first dipping them in glycerin or water for a moment, until the cervix is full. And now place a wad of cotton tied with a string just against the cervix; the tents are cut off to a length which will just permit them to entirely enter the os externum without pressing on the fundus; they have each a short string attached to them. This is kept up for a number of days, the patient being kept in bed. Sometimes the dilatation causes pain; often none. If, when the uterine canal is large enough to admit the finger, there is no discharge of pus with relief of the symptoms, I anesthetize and curette. I now pack with gauze and repeat for a number of days. I cannot at present recall a case of tubal distention where I did not get some discharge after packing with gauze or dilating with tents for some time. Very often there is a very offensive watery discharge comes through the packing, even soaking into the bed. Every case is permanently relieved."—*Pacific Medical Journal*.

THE TREATMENT OF BRONCHO-PNEUMONIA.—Dr. Nothnagel (*The Medical Press*) states that the auxiliary muscles of respiration must be acted upon in order to avoid asphyxia, cyanosis and carbon-dioxide-poisoning. For this purpose, water-baths or Priessnitz's wet cloths are used. Under this treatment

the patient is placed in a bath and a spray of cold water driven against the thorax, or the ordinary douche will serve the same purpose. To avoid venous stasis the position of the patient should be changed every hour by the nurse, and he should not be allowed to remain long upon his back. The nurse should see that the patient makes four or five deep inspirations every half-hour. Drugs are administered for the purpose of removing the secretions by expectoration. Inhalations are useless, and ammonium chloride, sodium chloride, oleum terebinthinæ are no better. A few expectorants may suit special cases, as decoction of senega and ammonium chloride. To relieve cough we have at hand narcotics, such as belladonna, hyoscyamus, that greatly weaken, and are avoided at the present day. Codeine, in double the dose of morphine, has been much lauded as a remedy for cough. If the cough be severe, morphine with aqua laurocerasi may be given in small quantities; the latter alone does not afford relief. Morphine may be used with benefit in some so-called dry coughs—those produced by hyperesthesia of the vagus branches in the lung. If the patient swallows all that comes up, or when he is too feeble, and in this case moist râles will be heard, or when the mucus is tenacious, we must conclude that the cough is dry. For tenacious secretions the stimulating expectorants, as benzoic acid and senega, are indicated, or sodium chloride with warm water as an inhalation may give relief.—*American Jour. Med. Sci.*

PARALYSIS CONSECUTIVE TO A PSEUDO-MEMBRANOUS ANGINA RECOGNIZED

AS NON-DIPHTHERITIC BY THE BACTERIOLOGICAL EXAMINATION.—Under the above title Bourges (*Archives expérimentelle de Pathologie*, January, 1895) describes a case with the clinical picture of diphtheritic paralysis, but in the throat of which no Klebs-Löffler bacilli were found. The case occurred in a boy of seven years, in whom appeared suddenly high fever, headache and pain in the throat. The next day the tonsils were gray and swollen, but no false membrane was present. Two days later the local signs had gone. Nine days from the first attack a second attack of malaise and fever occurred, with marked erythema on the neck, forearms and limbs, but not on the trunk; the throat was normal, and the eruption disappeared two days later without desquamation.

A week from the beginning of this second attack the patient was taken with headache, fever and sore-throat, and the next day a white, easily detachable false membrane was present over the tonsils; this remained until seventeen days later, when it had entirely gone, and the child was in fair health, though remaining pale and thin.

Sixteen days after the disappearance of the membrane the child became restless at night, and the next day complained of abdominal pain and headache; a little fever was present.

Two days later convergent strabismus developed, followed in forty-eight hours by usual intonation of the voice and regurgitation of liquid food.

The regurgitation disappeared in a short time, but three days after its appearance the child was unable to stand, though still able to move its limbs in bed.

The paralysis remained incomplete, sensation normal, knee-jerks absent. Cure was complete at the end of two months.

The bacteriological examination of the false membrane showed the only virulent organism present to be the streptococcus pyogenes. The child's mother, who had been constantly nursing him, was attacked during his illness by a similar pseudo-membranous angina in which the sole pathogenic organism was the streptococcus pyogenes.—*Amer. Jour. Med. Sci.*

DIPHTHERIA BACILLUS IN A PNEUMONIC LUNG.—Dr. A. P. Ohlmacher (*N. Y. Med. Jour.*) makes a preliminary report, giving an abstract of the autopsy in the body of an insane man dead of labor pneumonia. During the progress of the autopsy several tubes of Loeffler's blood-serum culture medium, were inoculated from the substance of the affected lung and from the meningeal pus, with the observance of strict bacteriological precautions. Cover-glass smears were made from the pus under the pia mater and from the tissue of the diseased lung. The suture preparations from the meningeal pus showed the diplococcus lanceolata only. The two tubes of Loeffler material inoculated from the pus of the meninges showed only the diplococci of pneumonia. The two tubes inoculated from the substance of the right lung showed pronounced culture; after twenty-four hours' stay in the incubator, and plates of glycerine agar were prepared from these cultures. On both sets of these plates two distinct kinds of colonies developed and a subsequent study showed them to be composed of *strepto-*

coccus pyogenes aureus and the other of *Bacillus diphtheriæ*. The diphtheria bacilli obtained from this case has been studied through several generations and been found to possess the usual morphological and physiological characteristics of this species. It is a moderately long example of this bacilli with a tendency to form the irregularities in shapes usual in the longer varieties.

NUCLEIN IN DIPHTHERIA.—At a meeting of the Society of Medical Progress of the New York West Side German Dispensary, held 14th April, Dr. William Jacobson read a paper on the use of nuclein in the treatment of diphtheria and other contagious diseases. For the introduction of this agent (which is a normal constituent of blood-serum chemically represented by 49 parts of hydrogen, 32 parts of oxygen, 29 parts of carbon and six parts of phosphorus), he said we were indebted to the researches of Professor Victor Vaughan and Dr. Charles McClintock, of the University of Michigan. Out of 200 cases of diphtheria, scarlet fever and measles, which were observed during several months, he claimed that there had been only nine deaths, and that in these cases the fatal result was due either to the fact that the nuclein injections were not made until the disease was too far advanced for any remedy to be of any service, to necessarily fatal complications, or to lack of proper care or to other unfavorable conditions affecting the patient. The theory upon which nuclein was employed was that, as nuclein was found to a greater extent in the blood of healthy than in that of diseased persons, it was the real food upon which the blood-tissues fed, and

as such was Nature's own antitoxin. Nuclein was first tried on a girl four years of age, who was suffering from diphtheria. The agent was introduced into the system hypodermatically and in a very small quantity. It was found that the temperature at first slowly rose, and then had a sudden drop. The pulse soon became normal, and in three days the child showed no sign of disease. The result was so successful that the treatment was resorted to in other cases, and with similar good results. "To treat fever," said Dr. Jacobson, "we must remove the cause, the toxins, and especially, as in contagions, the microbe and its poison. Nuclein is the substance to which the cell owes its resisting power, and if present in sufficient quantity the microbe and its toxine are prevented from attacking the cell, and are ultimately destroyed."—*Boston Med. Surg. Journal*.

TREATMENT OF DIGESTIVE DISORDERS.—In the management of cases of digestive disorders, in the clinic of Dr. S. Solis-Cohen, treatment is very often begun by a thorough cleansing of the alimentary canal, either through purgation by calomel or irrigation of the intestines. After this the patient is placed for a time upon an exclusive milk diet, the following routine being usually carried out. One drachm of pancreatin and three drachms of sodium bicarbonate are mixed, divided into twenty-four powders and dispensed in waxed papers. The patient is instructed to dissolve one powder in one ounce or two ounces of cold water, and to add the solution to six or eight ounces of warm milk. The mixture is to be stirred quickly and

then drank slowly during five minutes. The object of adding the pancreatin and alkaline powder is, of course, to digest the milk without calling upon the patient's secretions; but in order to avoid the unpleasant taste of peptonized milk, the artificial digestion is allowed to go on in the patient's stomach. The milk, with the digesting powder, is taken every third hour. In milder cases this plan is continued from two or three days to a week; in severer cases for longer periods. Acute indigestion needs, as a rule, no other treatment. Chronic cases receive, later, suitable medication.—*Philadelphia Polyclinic*.

A QUICK METHOD FOR THE FILTRATION OF A SMALL QUANTITY OF URINE.—For a long time it has been a problem to know how, with the apparatus usually at hand, to obtain quickly and easily a small quantity of clear urine from a cloudy specimen in order to make the usual test for albumin.

The following plan, which has proved extremely easy and satisfactory in my own case will, I think, be found equally so in the hands of others: A small quantity of the cloudy urine is placed in a test-tube, the mouth of the test-tube plugged with cotton with a moderate degree of firmness. A second test-tube is placed with its mouth to the first. The position of the tubes is now reversed so that the one with the urine is bottom up. The upper tube is now carefully and gently heated over the flame of a Bunsen burner or alcohol flame, and the expansion of the air above the urine immediately forces it through the cotton plug, and the filtered urine collects in the lower tube. In this we imitate to

a degree the rapid-filtering apparatus of laboratories, but use pressure above the fluid to be filtered instead of an

air-exhaust below,—Louis F. Bishop, M.D., *The Boston Medical and Surgical Journal*.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From April 4th, 1895, to April 17th, 1895:

Robertson, Capt. Reuben L., Assistant Surgeon, is granted leave of absence to, and including, July 3d, 1895, on which time his resignation has been accepted by the President to take effect.

Pilcher, Capt. James E.—Leave of absence for two months, on surgeon's certificate of disability, is granted Capt. James E. Pilcher, Assistant Surgeon.

Banister, Capt. Wm. B., Assistant Surgeon, is relieved from duty at Fort McIntosh, Texas, and ordered to duty at Fort Omaha, Nebraska.

Reynolds, First Lieut. Frederick P., Assistant Surgeon, is granted leave of absence for one month, to take effect upon his relief from duty at the U. S. Military Academy, West Point, New York.

The following named officers will report in person to Major Calvin DeWitt, Surgeon, President of the examining board appointed to meet at Fort Leavenworth, Kansas, on Wednesday, May 1, 1895, at such time as they may be required by the board, for examination into their fitness for promotion, and upon conclusion of their examination will return to their proper stations: First Lieut. Thos. U. Raymond, Assistant Surgeon; First Lieut. Henry D. Snyder, Assistant Surgeon; First Lieut. Allen M. Smith, Assistant Surgeon; First Lieut. Joseph T. Clarke, Assistant Surgeon.

THE NAVY.

Two weeks ending April 27th, 1895:
Barnum, M. W., Assistant Surgeon,

ordered to examination for promotion May 15 next.

Page, J. E., Assistant Surgeon, ordered to examination for promotion May 15, next.

Brathwaite, F. G., Assistant Surgeon, ordered to the Naval Hospital, Norfolk, Va.

Walton, T. C., Medical Inspector, ordered as Delegate to the American Medical Association, Baltimore, Md.

Dickson, S. H., Surgeon, ordered as Delegate to the American Medical Association, Baltimore, Md.

Pickrell, G. McC., detached from U. S. S. "Newark," home and two months leave.

Stone, L. H., Assistant Surgeon, ordered to the U. S. S. "Newark."

Loundes, C. H. T., P. A. Surgeon, detached from Coast Survey Steamer "Hatteras" and to Mare Island Hospital.

DeValin, C. M., Assistant Surgeon, detached from U. S. S. "Vesuvius" and to the U. S. R. S. "Vermont."

Smith, Howard, Surgeon, retired, leave extended six months to remain out of the United States.

MARINE HOSPITAL SERVICE.

For 15 days ending April 15, 1895:
Purviance, George, Surgeon, detailed as Chairman of Retiring Board for physical examination of officers of Revenue Cutter Service, April 8, 1895.

Austin, H. W., Surgeon, detailed as member of Retiring Board for physical examination of officers of Revenue Cutter Service, April 8, 1895.

Carter, H. R., detailed as Recorder of Retiring Board for physical examination of officers of Revenue Cutter Service, April 8, 1895.

Glennan, A. H., P. A. Surgeon, granted leave of absence for three days, April 9, 1895.

Stoner, J. B., P. A. Surgeon, when relieved to proceed to Philadelphia, Pa., for duty, April 5, 1895.

Guiteras, G. M., P. A. Surgeon, granted leave of absence for six days, April 5 and 8th, 1895.

Perry, J. C., P. A. Surgeon, to proceed to Portland, Oregon, and assume command of Service, April 5, 1895.

Eager, J. M., P. A. Surgeon, to

proceed to Gulf Quarantine Station for temporary duty, April 5, 1895.

Stewart, W. J. S., Assistant Surgeon, to proceed to Philadelphia, Pa., for temporary duty, April 9, 1895.

Norman, Seaton, Assistant Surgeon, to proceed to Norfolk, Va., for temporary duty, April 9, 1895.

Cumming, H. S., Assistant Surgeon, to proceed to Boston, Mass., for temporary duty, April 9, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

Dr. J. R. Irwin has removed from Croft to Charlotte, N. C.

We regret very much to learn that Dr. Oscar McMullan recently sustained a very severe injury in a run-away. Both right arm and leg were rendered useless for a while, but we are glad to note improvement has set in. We hope he will soon be all right.

The Rio Chemical Co., of St. Louis, have issued a neat and useful wall atlas of the world, which has been sent to all physicians whose address they had. Any of our readers who have failed to receive one, will do well to send his address to the publishers.

The doctors of East Hampton, N. Y., are puzzled over a woman who apparently died about April 18th, but whose body has been lying in its coffin for a week with no evidence of decomposition. Why don't they hold a — mortem and find out whether or not she is really dead or shamming?

A SUGGESTION TO THOSE ATTENDING THE MEETING IN GOLDSBORO.—In making up your budget of expenses remember to put in the item—\$2.00 for the JOURNAL. Should it be you are a little behind, and it is convenient, you might come prepared to pay the whole balance.

The monthly mortuary report of Wilmington for March, 1895:

	Whites.	Col.	Total
Population.....	9,000	13,000	22,000
Total deaths.....	13	26	39
Annual death rate rep.	17.3	31.7	21.3

For April, 1895:

Total deaths.....	10	12	22
Annual death-rate rep. .	13.3	11.1	12

Dr. Augustus C. Bernays, of the Marion Sims College of Medicine, of St. Louis, has published a report of the surgical clinic which he held last November complimentary to a number of physicians who were *en route* to the meeting of the Mississippi Valley Medical Association. The report is issued in handsome style and is illustrated. One half-tone picture shows the sur-

geon, his assistants and nurses in the process of purification. The operations were: Occlusion of Œsophagus; Lymphosarcoma of Neck; Osteoplastic Resection of Skull; Nephrectomy; Neurectomy; Appendicectomies.

Messrs Wm. R. Warner & Co. have removed their New York Branch to the more commodious and convenient quarters, No. 52 Maiden Lane. This change became imperative, the space at their former salesrooms having at last become inadequate to admit of the proper conduction of their largely increased business.

There will constantly be on file a complete list of the leading Medical and Pharmaceutical Journals of the United States, and a cordial invitation is extended to the profession to consult them at any time.

THE DISCOVERY OF HELIUM.—The recent account of the discovery of a new element, argon, in atmospheric air, by Lord Rayleigh and Professor Ramsey, is already followed by the announcement by the latter that in his experiments with the mineral cleveite, for the purpose of discovering a compound of argon, in which cleveite was treated with sulphuric acid, argon was evolved, but associated with some strange gas. This turns out to be helium, the lightest of all the elements, the existence of which had already been inferred from the line D₃ in the solar spectrum. The existence of the new element was in a few days confirmed by Professor Crookes, who identified its spectrum. The discovery of an element whose existence had been previously inferred on theoretical grounds, is certainly a most remarkable vindication of chemical theory.

The mineral cleveite was supposed to yield nitrogen when acted upon by sulphuric acid. The evolution in its place of a mixture of argon and helium, suggests the introduction of new and extremely complicated factors into the already complicated chemistry of the nitrogen compounds.—*Ex.*

"For the Medical Profession Only," by no means excuses the sending of disgusting nude pictures to every physician's address through the mail, unsealed. Instead of excusing, it aggravates the offence, because pruriency is piqued by the very device. The mail of a large majority of physicians is delivered at the residence-address, and not at the consultation-office. A high-handed devil-may-care answer to criticism of such doings plainly says to the medical profession: "This matter of the use of the governmental mails for the dissemination of purely commercial advertisements, made in such a way that the reputation of the medical profession is used and bandied about and jeopardized—this has to be stopped!" The dissemination of genuinely scientific medical literature has already been endangered by this abuse, and should the public, however mistakenly, visit upon us the indignation of laws restricting or forbidding the use of the mail for legitimate medical literature, it would be at once a public and a professional calamity. But this calamity would be due to our endurance of, and indifference to, the impertinence of advertisers who fill the mails with filth that passes under the pretext of being medical, but which is anything but medical.—*Med. News.*

WOODEN BREAD.—A German periodical devoted to wood industries an-

nounces that food products consisting partly of wood are now manufactured. At Berlin a factory has been built which is turning out about two hundred quintals of wooden bread a day. Sawdust is subjected to chemical treatment, after which it is mixed with one-third farina and prepared like ordinary bread. The product at present serves only as food for horses, but the Berlin Tramway Company, which is the most important customer of the factory, is

well pleased with the results. The manufacturers say that wooden bread constitutes also an excellent food for man.—*Ex.*

The police census shows the population of New York City to be at present 1,849,866, of which 925,310 are males and 924,556 are females—a difference in favor of males of 754. The increase since October, 1890, is 139,151.

Reading Notices.

On account of the unveiling of the Confederate Monument at Raleigh, N. C., May 20th, 1895, the Cape Fear and Ya kin Valley Railway Company, will sell round-trip tickets to Raleigh, N. C., at the rate of one cent per mile traveled; tickets to be sold May 19th and 20th, 1895, with final limit May 22d, 1895. W. E. KYLE, Ag't.

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 13, this issue.) See remarks on their Arom. Fluid Pepsin also.

Free of Charges.—The therapeutical applications of Peroxide of Hydrogen (medicinal), Glycozone and Hydrozone, by Chas Marchand, Chemist. Ninth edition.

This book of 200 pages, which contains all information on the subject, with reprints of elaborate articles by leading contributors to Medical Literature, will be mailed to doctors, mentioning this publication.

Send full address to Chas. Marchand, 28 Prince St., New York.

Dr. Deering J. Roberts, editor of the *Southern Practitioner*, Nashville, Tennessee, writes: "Elixir Six Bromides (W.-G.'s)—From a recent and thorough trial of this preparation, we find that it is justly entitled to the claim made for it, 'to rank as one of the most valuable therapeutic agents in quieting non-inflammatory excitement of the reflex centres of the cord of the peripheral afferent nerves, of the genital function and of the cerebrum.'" In one case in which it was used—neurasthenia—with nervous irritation following parturition, in which everything else failed, its result was most happy. There was no depression of an already weakened circulation, due to a severe post-partum hemorrhage; but, on the other hand, it was greatly improved. We have one case of epilepsy, in which it is doing more good than any previous remedy yet used. In other cases its results are good in quieting nervous irritability."

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, MAY 20, 1895.

No. 10.

Original Communications.

ECTOPIC PREGNANCY.

Remarks made by invitation before the King's County Medical Association, Brooklyn, in the discussion of Dr. L. Grant Baldwin's paper on Ectopic Pregnancy, April 9, 1895.

BY AUGUSTIN H. GOELET, M.D., New York.

In deciding upon the course to be pursued when the diagnosis of ectopic gestation has been made, there are three points which must be considered. First, whether the tube is still intact or unruptured and the stage of the pregnancy; second, if rupture has occurred, whether it is between the folds of the broad ligament or extra-peritoneal; third, whether it is intra-peritoneal.

Operative interference should never be withheld in the presence of rational indications for its necessity, but it is manifestly correct for the advocates of primary cœliotomy to contend that the existence of tubal pregnancy is an indication for immediate operation and

that rupture is always imminent. It is true that rupture has occurred as early as the fourth or fifth week, but, according to Winckle, whose experience has been exceptionally large, it occurs most frequently between the third and fourth month. According to Tait, also, it occurs more frequently from the twelfth to the thirteenth week.

When rupture with hæmorrhage occurs between the folds of the broad ligament immediate operative interference is not demanded or indicated, as it is comparatively harmless and may be left to Nature, or absorption may be promoted by the use of electricity if the growth of the fœtus has

been arrested at a sufficiently early period. Even Tait insists upon the comparative harmlessness of hæmorrhage in this location following rupture. If suppuration occurs later, the whole mass can be more satisfactorily evacuated through the vagina than by cœliotomy. It is more easily reached by this route, and the operation involves less shock and less risk to the patient.

Even where intra-peritoneal rupture occurs the records of cœliotomy show that hæmorrhage is often found to be moderate in amount, and not in itself sufficient to furnish occasion for immediate surgical interference. (Lusk, in *Clinical Gynecology*, page 752.)

The patient should be very closely watched, and if the hæmorrhage is uncontrollable cœliotomy should, of course, be resorted to at once, and without delay. If, however, as is often the case, it is limited in amount, it may be let alone, and if the patient be kept absolutely quiet, the clot will be surrounded by lymph as a result of the inflammatory action which supervenes, and it is eventually shut off from the general peritoneal cavity. Subsequently, if operative interference becomes necessary, the vaginal route will be safer and more satisfactory than opening the abdomen. It is safer to evacuate the clot at a later period than to do so immediately, because by waiting the ruptured blood-vessels are allowed to close, and we would no longer have hæmorrhage to contend with. It has, no doubt, been the experience of many of you that these cases have been conducted to a successful termination in this manner. In this connection, a case which I reported in the *Medical Record*, about

1880, will be interesting, as showing that a favorable termination may result in removal by this route, even when suppuration has occurred. A patient came under my observation who was supposed to be suffering from a hæmatocele of considerable size. For some unknown reason suppuration occurred and it was evacuated through the vagina and the diagnosis was made clear. It proved to be an ectopic gestation, the four months fœtus being removed in a state of decomposition. Drainage was maintained through the vagina and the patient made good recovery, remained in excellent health, and bore several children afterwards.

I am strongly opposed to operative interference for all cases of pelvic hæmorrhage, that is, cœliotomy for these conditions, though this course has some strong advocates who believe that it is nearly always due to ruptured tubal pregnancy. The folly of such a course, which, it must be admitted, submits the patient to needless risk, is frequently illustrated. In this connection I recall a case upon which I operated ten or eleven years ago, which was reported in the *Annals of Gynecology*. A diagnosis of fibro-cystic tumor was made and confirmed by the late Dr. C. C. Lee, the patient coming to me from a distant part of this State and giving an imperfect and unsatisfactory history. The operation revealed a mistake in the diagnosis, the tumor proving to be a very large hæmatoma, which projected high up into the peritoneal cavity. The case terminated favorably after evacuation through the abdomen and drainage through the vagina, but the operation would not have been performed if a correct diagnosis could have been

made previously, and a favorable termination would have been reached earlier and more satisfactorily than by interference surgically. In this case there was no evidence whatever that the hæmorrhage had been due to ruptured tubal pregnancy.

In considering the question of dealing with tubal pregnancy before rupture occurs, the question which suggests itself is, Why submit the patient to a needless and dangerous operation when a safer and more rational course is open to us? It is urged that the necessity for operative interference in this stage is the danger attending rupture. The death of the fœtus, which can certainly be accomplished by electricity, removes this danger. Besides, it has been shown that the danger following rupture has been exaggerated; that extra-peritoneal rupture is comparatively harmless, and that the hæmorrhage following intra-peritoneal rupture is often moderate in amount and not in itself sufficient to demand surgical interference. Of course you understand that I would not advocate withholding operation where the hæmorrhage is serious and uncontrollable.

It has been urged against electricity that its use may produce rupture, but this is manifestly unwarranted, since it has never occurred in any of the large number of cases where it has been employed. Likewise the objection that the dead fœtus may become a source of danger to the mother can be disregarded in the face of abundant evidence to the contrary. Theoretical objections of this nature will hardly weigh against statistical evidence. The truth must be admitted. No deaths have occurred which could be

attributed to the use of electricity in ectopic gestation and no evil results have followed. On the contrary, the health of the patients has been good for periods varying from one to eight years afterwards. The fatal cases reported, four in number, have been shown to be due to other causes, and in no way attributable to electricity.

On the other hand, the advocates of primary cœliotomy must admit that there is a mortality following this operation, even with expert operators, to say nothing of the risk of the occurrence of ventral hernia and the disfigurement of the abdominal scar, both of which are now being urged as advantages of vaginal hysterectomy as opposed to abdominal hysterectomy.

Upon the evidence presented, therefore, the use of electricity in unruptured tubal pregnancy, prior to three or three and a half months, is the most rational proceeding which we can adopt. In cases, also, where the diagnosis of tubal pregnancy is doubtful, electricity should also be used in preference to pursuing a waiting policy to have the diagnosis cleared up, since there is no condition likely to be mistaken for it, which could in the least be unfavorably influenced by its use.

PURGATIVE FOR CHILDREN.—We find the following prescription in the *Columbus Medical Journal*. It is said to be not only effective, but also pleasant to take—a characteristic not always found in useful remedies:

℞.—Glycerine 3 i.
 Ol cinnamoni gtt. vi.
 Triture bene et adde
 Ol Ricini ʒ i.
 M. et Sig. ʒ i. pro re nata.

WHERE TO LOCATE.

An Address delivered before the Alumni Association of the University
College of Medicine, Richmond, Va., April 11, 1895.

BY BENJAMIN K. HAYS, M.D., Oxford, N. C.

It is with no little embarrassment that I stand before so learned a body of men.

To you I am indebted for all that I know pertaining to medicine, and I feel that I have nothing now to offer you to-night. Asking your patient consideration, I shall address myself chiefly to the young men present, and, as a member of the graduating class of 1894, discuss briefly a subject of the greatest importance to each one of us, namely, *Where shall we locate?*

At a meeting of an association of doctors which took place a few years ago in one of our southern cities, the President took, as the subject of his annual address "The Progress of Medicine in the South."

The paper which he read was a short one, yet to him who in his heart holds the love and reverence of this, our native land, next to that of Deity, it presents more food for thought than any other essay known to me.

I trust that every young man here to-night will get a copy of this paper and study it carefully, and even the older men, who have doubtless read it, might re-read it with renewed interest in the many valuable facts and suggestions which it offers.

In this paper it is clearly shown that no other territory of the same area has, in modern times, produced so many men of genius as the State of Virginia.

In every department of science and

art the South has produced her full share of laborers.

In many instances they have been found in the first rank, and in some, both in action and in meditation, they have trod paths where others could not follow, commanding both the admiration and gratitude of all humanity.

By no means least conspicuous among her sons, of whom she is so justly proud, have been her physicians.

Our text-book of surgery, in the chapter on Abdominal Surgery, observes that nearly all the progress that has been made in this department has been done by Americans.

The names of the men who have been chief in this are given, and three of the first four were southerners—Sims, of Alabama; Kinloch, of South Carolina, and the President of our own Alma Mater.

It neglected to mention the name of Ephraim McDowell, who was born in the State of Virginia in the year 1771, and at an early age moved with his parents to Kentucky. He began the study of medicine in the office of Dr. Humphries, of Staunton, and went directly thence to the University of Edinburgh. Upon his return to this country he located in the little town of Danville, Kentucky, where, in the year 1809, without assistants, without anæsthetics, without antisepsis or asepsis, without sympathy, threatened by an angry mob that had collected about his door, he performed successfully the

first ovariectomy known to the annals of surgery.

J. Marion Sims, the father of gynecology, was born and raised in South Carolina, and received his early medical education at Columbia. He located in the town of Montgomery, Alabama, nor did he remove to New York until after he was forty years of age, and had been doing his wonderful operation for vesico-vaginal fistula for more than four years, and even then the immediate cause of his move was the failure of his health.

Crawford W. Long, the discoverer of the anæsthetic properties of ether, who, in the year 1842, was the first surgeon to do an operation with his patient under the influence of an anæsthetic, was born, raised, lived and died in the State of Georgia, as did also Robert Battey, the eminent gynecologist, who devised the operation so familiar to you all, which bears his name.

T. Gaillard Thomas, the author of our text-book of gynecology, was born and raised in South Carolina, and graduated at the Charleston Medical College.

Dr. Joseph Price, the first abdominal operator in this country, was born and raised in Virginia.

In the death of Dr. Towles, last year, at the University, we lost an anatomist who stood second to none, and within the sound of my voice to-night there are men whose names are as much a part of medical history as any of those that I have called.

In studying the lives of these men, it is a noticeable fact that many of them moved away from the South either before or after they had made a success of medicine.

Let us pause for a moment and see if we can discover the cause for this.

Was it for increase of wealth? Was it for increase of reputation? Or was it that they desired larger fields in which to practice their chosen profession?

Some of them were doubtless actuated by one motive and others by another—perhaps the three reasons combined influenced many of them, but whatever the reasons were, it remains as a fact that a number of them went, and the question at once presents itself to us, Is it necessary to move away from the South in order to achieve success? Most emphatically, *No*. Would our chances to succeed be increased by moving away?

I do not for an instant believe that they would, nor do I believe it to be to our advantage, as a rule, early in life to leave our country or village homes to locate in a city.

A few years ago young men in search of homes were advised to go west. To-day the eye of the nation is on the South. We can scarcely take up a daily paper without seeing an account of some new industry started in the South.

There is new energy, new enterprise and new capital coming in this direction.

Here we belong to a dignified profession, working with one accord for the advancement of knowledge and the ultimate good of humanity.

In the west we would come in contact with quacks, charlatans and sharpers—men who have never attended a medical college, but are working simply to make money, and who will do anything for a dollar,

regardless of self-respect or the good of the patient.

If the object of your labor is to acquire wealth, let me say to those of you who have not already learned it by experience, that you are in the wrong profession.

It is true that an increase of wealth usually comes with an increase of ability, but the demands upon a physician of reputation to do charity work, nay, the necessity of doing charity work in order to acquire a reputation, is so great that you will not be able to save money from your practice.

Dr. Joseph Price finds it exceedingly difficult to maintain his private hospital in Philadelphia.

The elegantly equipped hospitals of Thomas in New York, and of Hammond in Washington, proved financial failures. Charcot, one of the greatest men that this century has produced, died in Paris a little more than a year ago, and did not leave as much property as did an old friend of mine who had spent his life practising medicine among the pine woods of North Carolina.

The sight of a city physician, with his splendid horses, his handsome residence, his comfortable and easy office is well calculated to excite the envy of the student. He forgets that all this show is for effect, and that this seemingly fortunate man often wears a smiling face and a broad-cloth coat over a heavy heart and an empty pocket-book.

After some enquiry into the subject, I venture to assert that of the one hundred and forty doctors practising in the city of Richmond, less than four of them collect \$5,000 per year

above their current expenses, less than twenty collect \$5,000 at all, and one-third of them do not make a comfortable living. I do not speak this to the disparagement of the profession in this city, but merely to dispel an illusion of many students that every city doctor is a wealthy man.

Is it for increase of reputation that you desire to locate in a city?

If you are a man of genius, believing that you can do some one thing better than other men, if you have the patience to wait and the intelligence to work for years for nothing, and if you have the means of support during these years of waiting, perhaps you would do well to locate in a city; but even then I question if it would not be better to begin in a smaller place and move to a medical center after your ability has been clearly demonstrated.

Jenner was a country practitioner, and when he announced to the world the result of his wonderful discovery, it was after twenty years of private investigation and experiment. Robert Koch was a country doctor, and moved to a city only after his work had attracted the notice of the German government.

Sims, as we have seen, moved to New York at forty years of age—nay, time will not permit me even to mention the names of the many eminent physicians that have lived and died in the country.

A friend of mine who was practising medicine in a thriving North Carolina town, said to me that a week rarely passed in which he did not do some serious surgical operation. He was the leading man in that part of the State, and was consulted on all occasions. Urged by his wife, he moved

to a city, where he came in contact with surgeons of national reputation. For years he was comparatively an unknown man, and, although his superior ability finally won for him success in other departments of medicine, he was never known as a surgeon—which had been his youthful ambition.

The names of William J. Harris, Rawley Martin, Willie McGuire, Latham, L. Cato and Preston, in this State, and of O'Hagan, Whitehead, Wood, Cheatham, Tucker, Duffy, Cobb, Booth, Payne, Picôt, Young, Baker, Way, Taylor and others, in North Carolina, are familiar to us as men of ability and high standing in the profession, yet they all live and practise in country towns.

Is it for larger fields that you desire a city practice?

It is true the fields are there, but is not every inch of ground under cultivation?

Do you desire the copartnership of able and progressive men?

The boldness and self-reliance which you will acquire by working alone will

be worth more to you than the advice of the entire medical profession.

Do you desire to be progressive yourself?

A volume of one of our leading medical journals forms a valuable library within itself, and reaches you only a day or two after it is published.

Do you desire to make contributions to medical literature?

The journals are not only willing, but anxious, to publish all that is instructive, and your article will be read with the same interest, whether you write from Rag Town or from New York.

Finally, gentlemen, it seems to me that your relative standing in the profession should have some influence upon your choice of a location.

I know not how others may feel, but as for me, I would rather be the first doctor on a small island in the South Sea than to live in a city in comparative comfort, yet sacrifice my individuality in the struggling competition of a metropolis.

Selected Papers.

SOME ETIOLOGICAL TYPES OF HYSTERIA.

BY WILLIAM BROWNING, M.D.

The great variety of symptoms and cases that at present are classed under hysteria renders the subject a difficult one to handle in a brief space. Whether we accept the teachings of the Charcot

school or not, the disorder is so common that it interests every practitioner and is often enough a disturbing element in every field of special work. Perhaps no less diversified are the factors that one time with another make up its etiology.

*Read before the Medical Society of the County of Kings, September 18, 1894.

Malnutrition and exhaustion may in some form represent more nearly than anything else its physical basis, and yet these terms are very far from being synonymous with hysteria. While various specific diseases frequently have a causal relation, there is as yet, I believe, no germ recognized as pathognomonic of hysteria.

The very nature of the trouble, involving, as it often does, the mental status of the patient and others surrounding, renders the quest for an etiology doubly uncertain. Now and then, by happy accident or long opportunity, we get some insight.

In attempting to describe the causes it is well first to make some kind of a classification. That here used is simply one of convenience and can claim little absolute value, except as serving well for presentation of the points that I wish to offer.

My division is as follows:

- (1) Congenital predisposition.
- (2) Faulty training.
- (3) Later accidental causation.

In practice all three of course, in most cases, enter as components, though in variable degree. And yet sufficient simple cases can be found for illustration. The course of the disorder itself is also distinguished by considerable differences for each class.

1. Congenital Basis — A constitutional type.

In this form we cannot often trace the cause beyond finding antecedents that warrant the expectation of a neurotic make-up. To work out the etiology fully would require a familiar knowledge of several generations. In general it is a close parallel to that of several other neuroses.

But some characteristics of this type

are worth noting. Here, once hysterical, always so. And yet the subject may not have a decidedly hysterical mind, except in its deeper lines, and preferably not to an exasperating degree. It is the wearying succession of hysterical manifestations, first in one, then in another part of the body. Physical marks or stigmata are common. This is the degenerative form par excellence, and tends rather to the development of some organic nervous disease than to any single lasting hysterical trouble.

*Case.**—A woman of middle life, whose pedigree and personal career for many years it is possible to give with exceptional accuracy. In the family all kinds of nervous disorders were rife. Not further removed than cousins and aunts, the list includes angina pectoris, asthma, epilepsy and suicide, diabetes and a fondness for intoxicants. A sister suffered from weak heart and died suddenly. Even this does not exhaust the bad history, though it certainly leaves little to desire in this regard.

On the other hand, this lady received an admirable training from infancy up. A wise and gentle firmness guided her all the way. In accordance with this her more conscious desires and tastes and all her sentiments were of the best. So far as training could go, she had a healthy dislike for all things morbid, and could *e. g.* safely be trusted to care most uprightly for a child. Further, her life during its early and middle years, was fairly free from sharp trials, though not an idle one.

*Two of the cases given in this paper occurred in the practices respectively of Dr. Delatour and of Dr. McCorkle.

But back of all this was the constitutional tendency that could not be eradicated. Hysterical troubles in piquant variety followed one another with brief seasons of respite:—Globus, hysterical knee, asthma, spinal irritation, fainting spells and cardiac irregularities, anorexia and diarrhœas, chills, insomnia, vesical and again rectal irritability, hyperæsthesias and anæsthesias galore, followed one another in endless succession, except for relatively free intervals. Every form of narcotic and intoxicant was used, and in turn given up when discovered and advised against; but only in due time to be succeeded by a new one. Of course, any little accident or upset was bound to bring its sequel in the shape of an outbreak. There was little, if any, maliciousness, that so often wears out the medical attendant, for, in accordance with well-ingrained training, his advice was followed very closely—for the time, at least. Nor did there ever develop any of the more lasting hysterical conditions.

This case illustrates well the hereditary type pure and simple, a life of prolonged struggle against tendencies that are ineradicable, a healthy mind so far as acquirements and inclinations go, with an inherited physique continually asserting itself.

Moral treatment here is uncalled for, or, at most, is but a supportive measure. Nor can any system of Weir-Mitchellism really cure these patients, though it may benefit and certainly tide over passing outbreaks. Symptomatic treatment of the particular manifestation in hand is usually in order.

2. Faulty Rearing—The mental type.

This amounts to a family trouble in the sense that for its development the

individual alone does not suffice—two or more persons are requisite just as they are for a quarrel.

It presents some peculiarities and almost covers the field once popularly accredited to this disease: Such patients show preëminently the mental characteristics of hysteria. They are the indulgent, self-willed, scheming class. Malingering to a greater or less degree, or more often the magnifying of trifles into monuments, becomes so natural that they no longer know the difference between that and reality. To suffer horribly from nothings, to practice deception, play on the feelings of those next to them, and perchance fool or worry their physician, is the object of their lives. Pronounced neurotic stigmata (physical signs) are with them less common.

Yet they easily simulate disease, and this is the more dangerous, just as the subject is less tractable than other people. Their mental perversity holds them right on in the downward way, and on occasion they may carry the matter without a waver to a fatal termination. For it is not such an unusual thing to see these persons with no real trouble sink nearly to the point where life ceases, and when a false course is pursued they now and then pass on to death. Thus the form that at the start appeared to have the least basis in fact, of necessity tends to the worst end.

As to what is meant by improper bringing-up, most of us understand better than we can describe. The underlying principle is summed up in Solomon's "Spare the rod and spoil the child." Corporal punishment may not be necessary, but wise example and some instruction in purpose, self-

control and regard for our fellows, is imperative. There is no lack here of parental affection, or what we call sympathy, but a development of this to excess. All these hysterics have as a basis an inordinate craving for sympathy. This may have been inborn, but often is a matter of over-culture. Certainly per contra self-control can be cultivated to great purpose.

Perhaps, theoretically, the Puritan cult is still the best, and certainly whatever its drawbacks, its followers were well-spared this form of hysteria. But in this, as in his other ways, the physician naturally prefers a more eclectic course than any arbitrary system, and believes thus, in the long run, to accomplish better things.

So-called sympathy may assume many forms. One of the most deleterious is purely physical and may be worth mentioning in some detail, as it tends to the development of other neurcses as well as hysteria. It is the fondling or "pawing over" habit that some parents have with their children. When most developed it may, as Dr. Shaw suggests to me, become a disease in itself—the seniors seeming to crave it also. The parent is ever holding, patting, rubbing, stroking, embracing and in all ways of touch petting the child, and this may be kept up until long after maturity. The outcome is an excessive development of the sensory sphere. It may, of course, play with the greatest force on the sexual side, though it is not that to which I refer, but to the erethism that amounts to a dominating sensory hunger, seeking satisfaction in any accessible way. Less often it leads to perversion in the way of an abnormal dislike for everything of the kind.

Such family-habits are, of course, so private that but exceptionally does even the physician get a full insight or realize their import. The extent to which this is carried in some families is to me at least astounding. Any advisory suggestion in regard to it is but too easily considered a thrust at their unusually happy family-life.

Of course the only successful treatment of this form of hysteria is the moral, whether under the guise of a rest-cure, or, if not too well established, by breaking up the surroundings in which it is flourishing, or by whatever other immediate means. It is always a difficult matter and requires a maximum of tact and patience.

Case.—Young man of nineteen years. No neurosis known in the family. One brother died of phthisis. The father died when the boy was three years old, but left the family amply endowed with worldly means. He had a "devoted mother," of the kind that humors every whim and fancy and will go anywhere or do anything that a child can suggest. By the time he was ten years old he became irregular in school work. He might keep along for some weeks or months, then feel it was too hard and be allowed to drop out. For a time a private tutor was provided. But the boy came to feel that continuous study was too much for him. In those days he complained some of headaches. He was never much of a hand to play with other boys, as he would soon feel tired and be allowed to give up.

In contrast to this it has been noticed that summers when away in the country he was always active, well and free from complaints. But on returning to town his old status would soon

come back. His more immediate troubles dated from the previous summer when he was hurried back to town by a slight irritation of the neck of the bladder. A mass of preputial smegma was removed, and for a few weeks all went well. Then, for the purpose of benefiting his supposed poor health, a trip to California was undertaken. There he was circumcised and an assumed stricture cut. He had never had gonorrhœa, and his physician here had previously passed a No. 34 sound. So that it was simply a spasmodic stricture, if, in fact, anything. Of course he was better for a few weeks. Then he had an attack of so-called grip and his eyes began to trouble him. He describes an irregular waviness of vision before both eyes, called by him "jiggling," and this has continued off and on since. Eminent ophthalmic surgeons in various cities have carefully examined his eyes, but always with negative result. His urethral trouble still returns frequently. It is usually relieved for the time by the passage of a sound. For this complaint he has been to specialists in several cities and often returns to his physician here. When this symptom sets in—so-called spells—he becomes almost deliriously frantic, gets wrought up to a high tension, passes large quantities of clear urine of low gravity (sometimes down to 1,004), and may talk of suicide. Of course those nearest to him consider his trouble alarmingly serious and are fully subservient. These attacks, he says, are brought on by worrying about himself. If his attention is gained to anything outside of himself they disappear. It is clear that on several occasions suggestion from medical

men has brought on or increased his symptoms.

Physically he is a strong, well-built, robust-looking chap. Careful and repeated examinations failed to discover much abnormal. A coated tongue, some pupillary hippus, a pulse easily and rapidly varying twenty or more beats, and occasional twitching around one or the other eye was about all. General sensation good in all varieties. No tremor at first examination, but this he had developed fairly for the next occasion.

It is almost dignifying his condition to call it hysteria. Clearly it is attributable to his circumstances and pampering in every way.

3. Immediate or Late Causation—The more purely physical form of hysteria.

Exhaustion of any kind may act as a cause; the various toxæmias, prolonged sickness, shocks mental or material, bad habits in eating, drinking and personal care, excesses, accidents, losses of blood, etc.

These are cases where they may be single attacks and permanent recovery. One after another may be brought on and chronic invalidism may result. Here neither the signs of a neurotic make-up nor a specially hysterical cast of mind are evident. The attack may at the moment seem severe, but it is a dissociated matter. It does not at first appear to be of an hysterical nature, but closer observation serves to decide its character, or, to borrow a term, that it is an hysterical equivalent.

Case.—Young woman, by profession a trained nurse. No nervous troubles acknowledged in her personal or family history. Has suffered some from rheumatism since scarlet fever six years

ago. Last year, according to good observers, she had two attacks of appendicitis, recovering, however, without operation. Then followed an attack of perihepatitis.

She is a bright, attractive, rather pale girl, of fair complexion and a bit restless. Evidently she fears that her case is serious, possibly a stroke. Yet neither to casual observation nor in the cognizance of the medical men who have known her longer, is there anything hysterical about her. Nor was there any apparent motive, such as we often find. She has always been an over-sleeper (nine to ten hours or more) and has been somewhat taxed by a recent case.

The present trouble began ten days before I saw her, and had already mended slightly. On waking one morning, she found the left hand numb as though asleep. Despite simple efforts to relieve, it extended up the arm that day. At the same time she felt "terribly fatigued." By the next day she realized when anything came in contact with the left foot that it gave the same peculiar sensation. Soon the whole corresponding half of the head, especially the left ear and half of the tongue, including the whole circumference of the mouth, became involved. As she was dizzy when up, heavy-headed, and had a feeling of plunging forwards when going down stairs, she has since remained in bed. She has been blue and cold all over, the numb sensation increasing when thr parts get warm.

P. 84 and fairly good so long as she remains recumbent. Tongue much coated, comes out straight. Cold sense found impaired on dorsum of left hand, though only to the wrist. Sensation as of something between the

fingers. Complains of a drawn-tight feeling in left palm and fingers and on chest-wall outwards from apex-beat. Pain sense reduced generally on the left side. Wrist reflexes on both sides increased in extent and force. Both knee-jerks are over-strong, at times even starting the arms to extend at the elbows. It may be worth noting that, because of an old injury to the right hand she is partially left-handed. Grip r. 54, l. 52½.

Right pupil said always to have been wider than left. Diplopia since present attack, but no single muscle proves to be affected. It is chiefly present in extreme lateral positions, either to right or left, when slight nystagmus appears. No sectoral defect of vision, though some contraction of field in each eye. No spinal tenderness.

However honest her complaints, they certainly were much colored by the knowledge that she had gained as a nurse, and to such an extent as to require close examination before coarser organic trouble could be excluded.

The practical sum of the case is, that the girl was not equal to the busy, trying life of a nurse. She was simply exhausted or tired out, and when this was helped by rest and restoratives, the trouble promptly abated. In less than a month from the onset she was well and away on a vacation.

In this form the forced-feeding and rest-cure work wonders, so-called moral discipline playing therapeutically an unimportant rôle.

In conclusion, I repeat that the three types given represent causes that usually combine in any particular case. By giving them in this way, as separate entities, I have hoped best to summarize the etiology of hysteria.—*The Brooklyn Med. Jour.*

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

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Editorial.

DR. BILLINGS TO BE RETIRED.

The *New York Medical Journal* thus refers to the retirement of Dr. Billings from the public service:

"We learn that Deputy Surgeon-General John S. Billings, of the army, has requested that his name be placed on the retired list, and that in October that distinguished officer will leave the Army Medical Museum, of which he is curator, and the Library of the Surgeon-General's Office, of which he is librarian, and these magnificent institutions, that have been made what they are largely by his ability and zeal, will know him no longer. Thus goes the last of the trio—Woodward, Otis and Billings, that gave the army medical corps world-wide reputation.

"Before the date he has selected for his retirement he hopes to complete his work on the final volume of the *Index-*

Catalogue, a work that has made the medical profession of the world debtors to the United States Government, to the Army Medical Department, and, last, and by no means least, to John Shaw Billings. In the *British Medical Journal* for April 20th, Mr. Jas. Blake Bailey, the librarian of the Royal College of Surgeons of England, pays tribute to Dr. Billings by advising librarians and authors to adopt as standard abbreviations those used by Dr. Billings in the *Index-Catalogue of the Surgeon-General's Library*. The system, he says, "was well thought out and has thoroughly stood the test of use." A catalogue of the museum also has been completed under Dr. Billings's direction, and we hope it may soon be published.

"In seeking official retirement Dr. Billings does not propose to give up work, as he has accepted the chair of hygiene in the University of Pennsyl-

vania, and his energy will be likely to find congenial employment in the duties connected with it."

The immense volumes of the *Index-Catalogue* which have, from time to time, been noticed in these pages, will stand as lasting memorials to the untiring energy and great ability of Dr. Billings. We heartily congratulate the Institution that has succeeded in getting him upon its staff of instructors.

DEATH AFTER ANTITOXIN.

A death has been reported from Brooklyn after an injection of antitoxine. Whether the death is a case of *post hoc* or *propter hoc* has not been satisfactorily determined. The preparation used was from an acknowledged authority in Germany and was furnished by one of the most reputable drug houses of this country. The physician, Dr. Kortright, in whose practice the case occurred, is well known among his confrères as a painstaking and conscientious physician. Whatever the cause of death in Bertha Valentine's case, it cannot check the enthusiasm that the cold statistics of reliable observers have created. Even should the remedy be proven to be dangerous in some cases, that would not be sufficient cause for its discontinuance. Anæsthetics cause a death occasionally and *always* jeopardize the life of the patient, but the danger from the disease is so much greater, that we do not hesitate to place the patient in that condition between life and death and hold him there for hours. The evidence of the curing property of antitoxine is accumulating so rapidly and from such varied sources that it will require more adverse crit-

icism and unfortunate incidents than have yet occurred to destroy the faith of the profession.

EFFECTS OF OPIUM EATING.

The trade in opium in India is a source of much revenue to Great Britain, but whether that fact influenced the report made by the Royal commission we are not able to say. There were more than 470 witnesses examined, of whom 152 were called, it is claimed, at the desire of the Anti-Opium Society. The report was practically unanimous and stated that "the temperate use of opium in India should be viewed in the same light as the temperate use of alcohol in England. Opium is harmful, harmless, or even beneficial, according to the measure and discretion with which it is used." The question arises, Can a man be temperate in the use of opium? The tendency is to increase the dose day by day, the tolerance of the system to the drug requiring larger and larger doses. Then this report is directly contrary to the assertions of medical missionaries in opium-eating countries, who are in daily contact with opium-eaters for years, and have excellent opportunity for studying its effects.

AMERICAN MEDICAL ASSOCIATION.—The forty-sixth annual meeting of the American Medical Association, held in Baltimore May 7th to 10th, was probably the most satisfactory ever held. The attendance was very large, but hospitable Baltimore found room and entertainment for all. We will give our readers the benefit of abstracts of the more interesting papers (and there were many of them) from time to time,

Reviews and Book Notices.

Diseases of the Ear. A Text-Book for Practitioners and Students of Medicine. By Edward Bradford Dench, Ph.B., M.D., Professor of Diseases of the Ear in Bellevue Hospital Medical College, etc. With eight colored plates and one hundred and fifty-two illustrations in the text, Octavo; 645 pages. D. Appleton & Co., New York; 1894.

In the preparation of this volume the author has had regard both for the general practitioner and the special surgeon. After a chapter devoted to the anatomy and another to the physiology of the ear, a chapter is devoted to physical examination. As the volume is intended, in a large degree, for the use of the general practitioner, who is not familiar with examinations of the ear, the author has preferred to err on the side of prolixity rather than conciseness. It is a fault with many works by specialists upon special subjects that the reader is given credit for more information on the subject than can be expected of the majority of general practitioners. The author goes into the subject with thoroughness and clearness. The technique of examination is fully considered and full instruction given in the use of the various instruments used in making an examination.

In contrast with most works upon otology the author emphasizes the importance of a thorough functional examination and has devoted an entire chapter to this subject. This chapter completes Section I.

Section II. is divided into four parts, which treat respectively of diseases of the auricle, of the external auditory meatus, of the middle ear and of the

mastoid process, comprising the conducting apparatus.

Section III. devoted to the Surgery of the Conducting Apparatus, is divided into three chapters—Middle-Ear Operations; The Mastoid Operation, and The Surgical Treatment of the Intra-cranial Complications of Aural Suppuration. This Section is based upon the author's personal experience, and is mainly intended, doubtless, for the specialist.

Section IV. treats of diseases of the perceptive mechanism, and will prove more interesting to the specialist than to the general practitioner, while Section V. discusses Complicating Aural Affections, such as those complicating the acute infectious diseases, those dependent upon functional nervous disorders, and chronic visceral conditions.

Taken all in all, the work strikes us as the most useful upon this branch for the general practitioner that has come to our notice.

Cod-Liver Oil and Chemistry.

By F. Peckel Moller, Ph.D. Peter Moller, London. And can be had from W. H. Schieffelin & Co., New York.

A large quarto volume of about 500 pages, beautifully printed and bound. The Introduction describes the country and the people of Norway, the various points in cod-fishing, etc. Part I. treats of Hydrocarbons; Part II. of the Derivatives of Hydrocarbous Hydrogen Compounds, Alcohols and Phenols; Part III., Oxygen Compounds—Ethers; Part IV., Aldehydes and Ketones; Part V., Carbohydrates

and Glucocycles; Part VI., Oxides; IX., Sulphur Compounds; Part X., Part VII., Mutual Combinations of Nitrogen Compounds; Part XI., Proteids, Ptomaines, Leucomaines and Part VIII., Hologen Compounds; Part Ferments; Part XII., Atoms.

Abstracts.

THE SERUM TREATMENT OF DIPHTHERIA.—Mya (*Lo Sperimentale*, February 21, 1895) discusses some of the drawbacks to the serum treatment. Cutaneous manifestations have been unanimously attributed to the treatment; they have rarely been hemorrhagic, and occasionally with general disturbance. A very few cases of articular complications have been noted, which pursued a rapid course, but were not serious. Some have attributed with apparently insufficient reason, renal, cardiac and nervous complications to the serum. The author's observations extend to over 50 cases, and the inconveniences caused by the treatment have been insignificant. In four cases there was a scarlatiniform eruption. The resemblance in one case to scarlet fever led to the isolation of the patient, but the subsequent course showed the true nature of the case. A rapid and evanescent urticaria was seen in two cases. Sometimes the temperature was raised and a general disturbance was noted. This, of course, is no contraindication to the treatment. Most authors have attributed the eruptions to the horse serum. The serum does not possess any demonstrable action upon the red blood cells. The author would attribute the cutaneous manifestations to a vasomo-

tor change or to an alteration in the lymphatic circulation. Fever must be due to exaggerated personal susceptibility. Dose has no effect in producing the cutaneous complications. The author does not think it possible to attribute either albuminuria or the myocardial and nervous manifestations to the serum. Among the 50 cases there was diphtheritic paralysis in four of five cases, and in one sudden death from cardiac complications; but in days before the serum treatment the author saw more cases of this kind. He concludes that the serum should be used early and abundantly in severe cases. It must be recognized that since the introduction of the serum treatment cases hitherto looked upon as beyond help have recovered, and especially in infants.—Santucci and Mucci (*Lo Sperimentale*, February 11, 1895,) first remark upon the technique of tracheotomy. They have treated 13 cases with serum supplied by Roux and Behring. The diagnosis was confirmed bacteriologically in six cases. The cases were all injected except one, immediately after admission. In only two cases was urticaria noted. Among 13 cases three died, representing a mortality of 23 per cent., whereas in seven cases otherwise treated during the same period four died. The authors

think that the results speak in favor of the serum treatment. They also are of opinion that tracheotomy increases the gravity of the case by opening the way to the absorption of infective products, but intubation is only practised in Mya's clinic in infants under one year of age, in whom recovery after tracheotomy has not been noted.—Silva (*Gaz. d. Osped.*, March 2, 1895,) has treated 17 cases with Behring's serum, details of which are given. The youngest patient was ten months, the eldest 15 years old. Bacteriological examination was made in 15 cases, and in 14 Loeffler's bacillus was found. Of the 17 cases three died, but one of these was obviously not diphtheria, and perhaps another should also be excluded; the mortality would then be 7.14 per cent. Among the recoveries were some very severe cases with complications. In six cases there were symptoms of laryngeal stenosis. Sometimes the serum was injected into the veins, and then half the quantity only was used. No signs of local irritation were produced. Enlargement of the submaxillary glands was noted, and the membrane began to detach itself spontaneously. Where albuminuria or nephritis was present the serum did not aggravate it. The general condition of the patient was improved. Recovery soon took place after the injection—in from five to eleven days. Paralysis was twice seen. There was a suppurative parotitis in one case. The author concludes that the results of the treatment were satisfactory.—*Times and Register*.

CERTAIN PELVIC ABSCESES, WITH A NEW APPARATUS FOR THEIR SUCCESSFUL DRAINAGE AND CURE.—(Schuyler

C. Graves, M.D., *Medical News*.) A short time ago every collection of pus in the female pelvic cavity, excluding such as might be associated with disease of the bony structures, was supposed to be caused by pelvic cellulitis, or pelvic peritonitis; so-called perimetritis, or parametritis. The discovery of the pus-tube came, and to-day there are many who believe that every form of pelvic suppuration in women, with the exception noted, is tubal, ovarian or tubo-ovarian. Time has proved that the former classification was wrong; but it does not take time to prove that the latter, also, is wrong.

The fact nevertheless remains that parametric abscesses without tubal connection do exist, and present indications for treatment radically differing from those of a purely tubal or ovarian origin.

The differential diagnosis, I admit, is difficult, and, at times, impossible. The history of the case, gonorrhœal or puerperal, together with the *tactus eruditus* of an experienced observer, often throws light upon the subject. The most reliable, though by no means pathognomonic, indication of a pelvic abscess that is neither tubal nor ovarian in character is the crowding of the uterus laterally, or particularly, upward and forward against the symphysis.

There is a principle in the practice of pelvic surgery bearing upon the treatment of circumscribed collections of pus that ought never to be ignored; it is this: Any inflammatory mass susceptible of enucleation should be approached through the abdominal cavity, and any inflammatory mass *not* susceptible of euucleation should *not* be approached through the abdominal

cavity. Therefore every form of extra-tubo-ovarian disease, suppurative in character, either primary or secondary, except when reason and common-sense contraindicate (and, with a view to possible temporary results, some forms of intra-tubo-ovarian suppuration, as when acute or subacute symptoms are found and vaginal bulging is noticed), should be approached through the vagina.

It is not necessary for me to enumerate the different phases of thought that led to the conclusions that followed my experience in these cases. Suffice it to say that such thought has been transmuted into gutta-percha (vulcanized dental rubber is as good), and a separable horseshoe drain-tube is herewith presented.*

Its advantages are the following:

1. It is light.



2. It is non-oxidizable, and, practically, non-corrodable.

3. It is separable and easily placed and replaced.

4. It cannot escape from the cavity of the abscess.

5. It can do no "prodding," as is the case, frequently, with the *white* rubber tubing, and which, in an abscess, soon becomes as hard as bone.

6. It is incompressible, and hence, unlike *any* form of rubber tubing, the latter, under similar circumstances, collapsing, and thus failing to drain.

7. It furnishes double drainage—drainage at two different points.

8. It can serve for irritating purposes as well as for drainage.

9. It can be kept clean, and, if thought necessary, can be removed and cleansed occasionally.

10. It can be worn indefinitely.

11. It causes no pain or discomfort.

12. It maintains no patency, because

of its incompressibility, and in this respect is superior to gauze packing, under the use of which openings tend to close.

13. It permits of painless dressings, which is an impossibility when gauze-drainage is employed.

In short, the apparatus seems to fulfil the indications, inasmuch as it is a drainage-tube that drains. I speak from experience.

When in the treatment of these abscesses the tube is to be placed in position, two incisions, about three-quarters of an inch apart are made at the proper points, and a heavy silk ligature or corresponding silver wire sufficiently long is passed from one to the other through the abscess-sac and brought down to a position where it can be manipulated.

*The cut represents one-half of the instrument, but the complete picture may readily be imagined by the reader.

Each half of the apparatus is now threaded upon the ligature or wire (in case silk is employed wire should be used as a leader), a knot made and drawn, whereupon, with a little manipulation, the instrument will naturally and readily adjust itself, forming a complete horseshoe, the convexity of which—and this is the only portion supplied with fenestræ—will project into the abscess-cavity, the “heels” remaining out of sight and away from pressure within the vulva.

This natural adjustment is much facilitated by the fact that the “heads” of the apparatus are practically solid, plane surfaces, and are not arranged for the fitting of one part into the other.

A small loop of the ligature or wire should be left at the base for the purpose of easy manipulation and to maintain coincidence between the long axis of the instrument and that of the vagina.

By proceeding after this fashion in properly selected cases the surgeon will, in my opinion, obtain gratifying results and will acquire the same in accordance with sound surgical principles and with the least risk to the lives of his patients.

ON SCARLATINA-LIKE RASHES IN CHILDREN.—(Dr. Henry Ashby, *Med. Chronicle*.) There is a strong family likeness between the various zymotic diseases. Various kinds of staphylococci seem to have a suitable soil prepared for their development in the body through the influence of the specific organisms of the infectious diseases, and the presence of the staphylococci may account for the similarity of some of the symptoms common to all. Varicelli mimics small-

pox, roetheln mimics measles. Some epidemics of influenza simulate diphtheria, being accompanied by a membranous sore-throat. The similarity in symptoms between various zymotic diseases is apt to give rise to much perplexity in diagnosis, and in no case more so than when a rash of the scarlatina type is present. The rash of scarlet fever is diffuse and punctiform, covering trunk, back and limbs; its mildest form remains visible twenty-four to forty-eight hours. A red rash, seen by candle-light and gone by daylight, is not scarlatina. Though a scarlatinal rash may appear to be erythematous, the red points corresponding to the hair follicles are of a deeper color than the surrounding skin. Though diffuse on the trunk, it may be patchy on the limbs. Full diagnosis is often very difficult. Scarlet fever may be practically feverless, and the temperature not more than 99.5° or 100° for a couple of evenings; the fauces may be only doubtfully reddened. A well-marked red-rash may appear in course of other diseases, as pneumonia, or after an operation, or during suppuration of some sort. The association of a red rash with certain epidemics of influenza has been noted by many others besides the author, but every case in which there is a red, punctiform, diffuse rash should be isolated and treated as scarlatina, unless it can be proved otherwise.

The scarlatinal form of rubella (epidemic roseola) most closely resembles mild scarlatina, just as, at other times, it resembles measles. Whether these two forms of rubella are distinct diseases or types of the same is still an open question. The author does not think that the scarlatiniform type can

always be distinguished from scarlet fever, as Clement Dukes believes. The great difficulty is in isolated cases. Where an epidemic exists the long incubation of rubella—eighteen to twenty-one days—distinguishes it from the short incubation period of scarlet fever, namely, two to three days. So-called surgical scarlatina is usually true scarlatina in a surgical sense; but where there is an excessive amount of suppuration there may be a red rash due to septicemia. Such a rash may occur in empyema cases and sometimes in diphtheria. There may at times be a second rash in scarlet fever cases, where there is much suppuration about the fauces and neck, but all these are a duskier red than the true scarlatina rash. The only drug eruption which is likely to be mistaken for scarlet fever is the erythematous eruption that some times follows the administration of belladonna or its alkaloid. The rash of antipyrine is more of the measles or nettle rash type. An erythematous rash may occur in mild or severe ptomainic poisoning, accompanied by gastro-intestinal disturbance and vomiting and diarrhoea, but in the child this combination should always suggest scarlet fever in an early stage. Ashby does not lay much stress upon desquamation as a symptom of recent scarlet fever, unless there be other evidence from the history or sequelæ, such as nephritis. "Peeling" may follow other diseases, as typhoid-pneumonia or influenza, specially that of the thick skin upon the hands and feet. In fine, a diagnosis in any case can only be arrived at by collecting all the evidence available, and not by giving one piece of evidence a fictitious importance.—*Kansas Med. Jour.*

NEW METHOD OF PREPARING CAT-GUT.—Dr. Cunningham, before the New York Academy of Medicine, described the following method for preparing catgut :

Since the discovery that a solution of formalin, 1-5000, is capable of preventing the development of micro-organisms in beef-juice, many observers have demonstrated its potency as a germicide. It must be used in a very dilute form, otherwise it produces a peculiar form of necrosis. Formalin unites with gelatin and albumin to form insoluble compounds. Commercial, surgical catgut is loosely wound on a glass spool and soaked for two days in equal parts of alcohol and ether, then rinsed in alcohol for a few moments and removed to a small jar having a tightly-fitting cover. This jar contains a mixture of equal parts of formalin, alcohol and boiled distilled water. After two days the catgut may be removed and washed several times in alcohol, or, preferably, boiled in normal salt solution. It is then ready for use, and is to be preserved in alcohol. The catgut does not become stiff or brittle, and even after boiling for a considerable time it does not disintegrate. By this method of boiling the irritating formalin is very thoroughly removed, and the catgut rendered thoroughly aseptic. Other normal substances, such as bone drains and rings, may be treated in this way with advantage, provided not too early absorption is required. Unless a considerable percentage of water is present in the formalin mixture, the catgut will be rendered brittle. The proportion of the other ingredients is not so important. Experiments on animals have shown that in the skin these cat-

gut sutures are absorbed in from ten to twelve days, and that about the seventh day they begin to show softening. Provided there is not too much alcohol in the mixture, the desired chemical change takes place in the course of a few hours.

The chairman, Dr. Curtis: This method seems to me exceedingly useful, for it enables the surgeon to readily prepare his own catgut, and in a short time. There can be no question as to the sterility of the catgut, for it has been used with success in experimental brain and peritoneal surgery.

APPENDICULAR ABSCESS BURST INTO ABDOMINAL CAVITY DURING EXAMINATION; OPERATION; RECOVERY.—(Jas. Daniel, *Brit. Med. Jour.*) M. W., aged 27, first came under my care about ten months ago. She complained of a severe pain in the right iliac region, accompanied with vomiting, constipation and fever. It had commenced about three days previous and was gradually getting worse. Purgatives, instead of relieving, had rather increased the pain.

On examination there was a distinct circumscribed swelling, very painful, but no distinct center of softening that would lead me to suspect suppuration, and she had no rigors. I therefore suggested the application of six leeches and hot fomentations, and gave her a saline mixture with large doses of belladonna internally and a one-fourth grain of morphine hypodermically. The next morning she was much better, the bowels had acted copiously, and in three or four days she appeared quite well again. Since then she has had several other attacks, coming on after intervals of three or

four weeks. After the fourth attack I suggested operation, which she declined, and consulted another practitioner. The last attack had commenced while she was away at Blackpool, and had lasted for three weeks without any material improvement. Her doctor told her she had better get home, as he had done all he could do, and that it might require an operation.

On April 7th, the day after her return from Blackpool, I was called in to see her; she was then suffering severe pain in the right iliac region, constipation, rigors, hectic and great emaciation. The swelling which I first saw had considerably increased in size, and was distinctly fluctuating; and, while examining it, to be sure of my diagnosis, I felt it suddenly give way under my fingers; the patient felt it also and fainted. After coming round she said she felt relieved. I explained to her friends the nature of the case, and they sanctioned my operating. On opening the abdomen, the pus welled up through the incision as I made it. The whole of the intestine was soaked in pus. I washed out the abdomen freely, first with warm water and then with a saline solution, sponged out the abscess cavity, and dusted well with iodoform. The cecum and colon were matted together, and the appendix could not be found. I made a counter-opening over the abscess, and put in a drainage-tube, and dressed antiseptically. The same evening she expressed herself as feeling very comfortable; there had been no vomiting, temperature 102°, pulse 108. Next morning I removed the dressing from over the drainage-tube, and soaked out of the tube about two teaspoonfuls of fluid with pus. On the second day

there was scarcely any fluid in the tube, and the patient was still feeling better; temperature was 100° , pulse 96. On the third day there was no fluid in the tube, which felt firmly fixed on account of the cavity contracting, so I removed it and dressed antiseptically. The wound continued to discharge for three or four days, and eventually healed up. The abdominal incision never gave any trouble. The woman is now wearing a belt, and is gaining flesh rapidly.

I think this case illustrates another instance of the dangers of delay, and, had it not been for my prompt action, the case might have turned out much more seriously.—*Mathews' Med. Quar.*

INJECTION TREATMENT OF HERNIA; WITH FORMULA OF FLUID.—(Walling, *Med. and Surg. Reporter.*) To Heaton and Warren, of Boston, belongs the credit of bringing this treatment into prominence, but it was not until it was considered from a scientific basis that it became really successful. Chemistry has come to our aid in this matter. Substances that are in themselves harmful, by combining them with other substances, or by arranging their elements differently, become useful therapeutic agents. Reducible hernia may be quickly and easily cured without danger, with little loss of comfort to the patient, and no loss of time; the essentials being a deft hand, a proper fluid and a trocar and canula syringe. The technique is as follows: Place the patient on the operating-table, reduce the protrusion, if out, wash the parts well with some antiseptic fluid, invaginate the scrotum with the index-finger, and locate the external ring; inject into the skin at

this point five minims or more of a 5 p. c. solution of cocaine, to which has been added one drop of a 1 p. c. solution of nitro-glycerine. Have the hernial syringe filled with fluid, displace the air, wipe off the drop of fluid which may appear at the needle's end, and carefully note how far the canula must be turned off in order to entirely cover the needle point. Allow three minutes for the cocaine to take effect, and, having drawn back the canula, exposing the needle spear, thrust the instrument through the skin and fascia at the point of the cocaine injection. Push the instrument well into the external ring, carefully avoiding the cord. Change the instrument to the other hand, and, again having invaginated the scrotum, be sure that the needle has entered the ring. Then screw down the canula until it covers the point of the needle, and, dipping down with the instrument, pass the canula by gentle manipulations up the canal to the inner ring. In doing this bear in mind that the inguinal canal is from one and one-half to two inches in length, lying nearly parallel with Poupart's ligament, and about one-half inch above it.

Having reached the inner ring, carefully and slowly inject from 3 to 5 minims of the fluid, a minim at a time; wait one or two minutes, slightly withdraw the piston of the syringe in order to empty the needle, and withdraw the instrument. Gently massage the parts to evenly distribute fluid. Cover the puncture with an aseptic collodion. There will be a more or less burning or smarting sensation experienced by the patient, but by lying quietly for a few moments it will pass off. It may return for a short time

when the truss is adjusted, which must be done before the patient rises.

He must be instructed to take the truss off only after he has lain down at night, and put it on before arising in the morning.

Repeat the operation every five or seven days, according to the amount of the fluid used and the degree of the reaction. There will be some soreness for a day or two, and the patient must be told this. A certain amount of healthy inflammation must be set up and maintained for a sufficient length of time, in order to effect a cure. From six to twelve injections usually suffice. The older the patient the longer the time required. A well-fitting truss must be adjusted and worn before operating for a few days, in order to see if it keeps the hernia well reduced.

The fee for treatment ranges from \$25 to \$100, or more. A double rupture should be double pay—one-half in advance. For fitting a truss a charge of \$10 in advance always.

Any physician may soon become expert in the operation; there is absolutely no danger if a proper instrument and fluid be used.

Ruptures in children are sometimes cured by a single injection.

The following is the composition of the fluid recommended:

- ℞.—Complex salts of aldehyde, 30 p. c.
 Iodo-ethylate of guaiacol, 30 p. c.
 Sulpho-tannate of zinc * 20 p. c.
 Free guaiacol 5 p. c.
 Beechwood creasote . . 15 p. c.

These rare and delicate chemicals are separately prepared, then carefully combined and dissolved in an antiseptic medium, in strict conformity with

their respective affinities and dosage. Injection dose, 3 to 5 minims.

Rinse out the syringe with alcohol, never with water, as it is decomposed by water.—*Mathews' Med. Quar.*

DIPHThERITIC OPHTHALMIA TREATED BY APPLICATIONS OF CRUDE PETROLEUM.—(Vian, *Recueil d'Ophthalmologie*, No. 8, 1894.) Dr. Vian details three cases of diphtheritic ophthalmia of different degrees of intensity treated by means of crude petroleum oil. The first case was one of simple ophthalmia neonatorum in a child a few days old, in which the corneæ were quite clear when first seen. The usual treatment was followed, swabbing with weak nitrate of silver solution twice a day and keeping the eyes clean with warm boric acid lotion applied hourly. After four days treatment the purulent discharge had much diminished, and the little patient seemed to be on the high road to recovery, when suddenly the character of the disease underwent a change and the palpebral conjunctivæ became covered with greyish false membranes. For this condition cauterization with lemon juice four times a day, and perchloride of mercury lotion was employed, but with this treatment the patient improved but little. Four days after this the right cornea became hazy, and in forty-eight hours became necrosed. Startled by the impotence of ordinary measures, and casting round for some untried germicide, Dr. Vian concluded to try crude petroleum oil, and commenced by applying it to the everted lids with a camel-hair pencil twice a day. On the second or third application the false membrane came away easily, leaving a clean surface beneath, which was carefully

sponged with pledgets of sterilized linen, between the applications of the petroleum the eyes were gently irrigated with boric acid lotion. At the end of five days, satisfactory progress having been made, the number of applications was increased to three and four a day, and after three weeks treatment he was able to report a cure; a slight haziness of the left cornea clearing up in a fortnight under application of yellow oxide of mercury ointment.

The second case was that of a child, aged three, whose lids were much infiltrated, the palpebral surface covered by dense grey membrane of very tough consistency, secreting pus scantily. Both corneæ were clear. He immediately commenced the petroleum treatment twice a day and boric acid lotion hourly. After a lapse of five days the cornea became slightly hazy, thereupon he increased the frequency of the application of the oil, until at the end of eight days he was using it every two hours to the exclusion of any other application. The infiltrated condition of the lids resisted all treat-

ment for about three weeks; the corneæ became more and more opaque until they assumed a greyish brown color; but, in spite of all, they maintained their resistance, and presented not the slightest trace of softening erosion. With a view of clearing up the corneæ, yellow oxide ointment was used daily, and on the forty-sixth day of treatment, the false membranes having disappeared and the lids become normal, the application of petroleum was discontinued. The daily use of the yellow ointment for three or four months resulted in the corneæ clearing up and restoration of vision.

The third case was a slighter one, also in a child of three, where there was a croupal membrane present, but no lid infiltration, nor was there any corneal affection during the whole course of the disease. In this case thirty days of treatment sufficed to obtain full restoration to health. These three cases appear to be pretty conclusive as to the effect of this treatment in three varieties of membranous conjunctivitis, or three different stages of its evolution.—*Med. Chron.*

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From April 18th, 1895, to May 1, 1895:

Ebert, Rudolph G., Assistant Surgeon, is granted leave of absence for two months, to take effect on being relieved from duty at Fort Huachuca, Arizona.

By direction of the President the retirement from active service, April 18th, 1895, of Col. Joseph R. Smith, Assistant Surgeon General, is announced.

Kendall, Capt. Wm. P., is granted leave of absence for six months, with permission to go beyond sea, to take effect upon his relief from duty at Fort Columbus, New York Harbor.

THE NAVY.

For the week ending May 4, 1895: *Stitt, E. R.*, P. A. Surgeon, detached from U. S. S. "Chicago" and to Nicaragua Canal Board inspection of work on the Isthmus.

Beyer, H. G., Surgeon, detached from Naval Academy and to the "Monongahela."

Atlee, L. W., P. A. Surgeon, de-

tached from the New York Hospital and to the "Richmond."

Edgar, J. M., P. A. Surgeon, from the "Richmond" and to the School Ship "Saratoga."

Means, V. C. B., P. A. Surgeon, from the "Saratoga" and to the New York Hospital.

Boyd, Robert, Assistant Surgeon, from Philadelphia Hospital and to the "Monongahela."

Morris, Lewis, Assistant Surgeon, ordered to the Philadelphia Naval Hospital.

MARINE HOSPITAL SERVICE.

For the 15 days ending April 30th, 1895:

Fessenden, C. S. D., Surgeon, detailed for duty on board examination of officers of revenue cutter service, April 17, 1895.

Hamilton, J. B., Surgeon, granted leave of absence for 12 days, April 20, 1895.

Stoner, G. W., Surgeon, detailed to represent service at meeting American Medical Association, April 25th, 1895.

Mead, F. W., Surgeon, detailed as chairman board for physical examination officers revenue cutter service, April 17, 1895.

Banks, C. E., P. A. Surgeon, when relieved to report at Bureau for duty as Chief of Purveying Division, April 24, 1895. Granted leave of absence 14 days, April 29th, 1895.

Williams, L. L., P. A. Surgeon, detailed for duty on board for examination of officers revenue cutter service, April 17th, 1895.

McIntosh, W., P. A. Surgeon, detailed for duty on board for examination of officers revenue cutter service, April 17, 1895.

Kinyoun, J. J., P. A. Surgeon, detailed to represent service at meeting American Medical Association, April 25th, 1895.

Woodward, R. M., P. A. Surgeon, to proceed to Ashtabula, Ohio, as Inspector, April 19th, 1895.

Wertebaker, C. P., P. A. Surgeon, granted leave of absence for ten days, April 16, 1895.

Brown, B. W., P. A. Surgeon, detailed as recorder board for physical examination officers revenue cutter service, April 17, 1895. Granted leave of absence for 20 days, April 23, 1895.

Stewart, W. J. S., Assistant Surgeon, to rejoin Station at Washington, D. C., April 20th, 1895.

Prochazka, Emil, Assistant Surgeon, to proceed to Evansville, Ind., for temporary duty, April 29th, 1895.

Thomas, A. R., Assistant Surgeon, granted leave of absence for thirty days, April 19, 1895.

Promotions.

Bache, Lieut. Col. Dallas, Deputy Surgeon General, to be Assistant Surgeon General, with the rank of Colonel, April 18, 1895.

Huntington, Major David L., Surgeon, to be Deputy Surgeon General, with the rank of Lieut. Colonel, April 18th, 1895.

Shannon, Capt. Wm. C., Assistant Surgeon, to be Surgeon, with the rank of Major, April 18th, 1895.

Miscellaneous Items.

Under this head space will be given (free of cost) to those paid-up subscribers who desire to change their location, or to dispose of practice or property. One insertion will be allowed, but inquiries must not be ordered addressed to this office.

Any news connected with professional men and matters in North and South Carolina will be appreciated by the Editor.

We learn that Dr. Albert Anderson, of Wilson, N. C., is prepared to make bacteriological examinations for the

diagnosis of cases of diphtheria. The doctor has recently been working with Dr. Kinyoun, in the Laboratory at

Washington, and it is a source of much satisfaction to know that some one in the State is prepared and qualified to do this work. His fee for each examination is only \$5.00, and should in all cases accompany the specimen.

The death is announced of Dr. Jno. M. Byron, who was Assistant Health Officer of New York during the cholera epidemic of 1892-3. Dr. Byron was a prominent bacteriologist.

Dr. James E. Reeves was sued for libel by the Amick Chemical Co. for applying to them such terms as quack, fraud, etc. One case came to trial and was decided for the defendant. This implies that the Doctor told the truth. We understand the capital stock of the concern has been decreased from \$300,000 to \$60,000.

The practice of medicine in Japan has progressed wonderfully in the past few years. This was made conspicuous by the excellent field service during the recent war. Well equipped local hospitals have been opened in most of the Japanese towns, many of them in connection with the Christian missions.

At the recent meeting of the American Medical Association, the report of the Trustees showed the receipts from all sources, for the past eleven months, was \$36,245.08, and the expenditures \$30,884.82. The receipts from the *Journal* were \$16,572.54, and the expenses \$29,344.97—cost of the *Journal* to the Association, \$12,772.43. The discussion that has been going on in some journals relative to the nature of the advertisements in the *Journal*, has evidently had its effect upon the Trus-

tees, for in their report they say: "During the year no advertisements of secret remedies have been accepted that were not accompanied by a formula, but to still further comply with what appears to be the desire of a large number of those interested in the highest success of the *Journal*, the editor, with the termination of the present contracts, has been instructed to accept no advertisements of medicinal preparations the proprietors of which do not give a formula containing names and quantity of each composing ingredient, to be inserted as a part of the advertisement."

Already the heat in the great cities is claiming its victims. There were reported two prostrations in New York and one in Brooklyn on the 10th of May with a maximum temperature of 89°.

The Illinois College of Pharmacy, Chicago, has added to its Faculty two strong men of national reputation—Mr. Henry Kraemer, well known to the pharmacists of this country as the Reporter on Progress of Pharmacy of the American Pharmaceutical Association, and Mr. John B. Nagelvoort, whose name is familiar to the readers of current pharmaceutical and chemical literature. These gentlemen are both apothecaries and distinguished for their ability and their active participation in the scientific work of their profession.

The one-hundred and forty-fourth anniversary of the founding of the Pennsylvania Hospital was celebrated recently by throwing open to the public view three new structures, on Spruce street between Eighth and

Ninth streets, consisting of a central building (erected as a memorial to Wistar Morris by his widow and his daughter) and two spacious wings. The new buildings can accommodate 140 patients for surgical treatment; and in construction, in sanitary arrangements and in general equipment they are models of the most advanced ideas in hospital-building—a fact which does honor to the progressive spirit of the management.

A tooth-pulling match is announced between two dentists. It will probably end in a draw.

The next meeting of the A. M. A. will be held in Atlanta, Ga., the first Tuesday in May, 1896. There was a sharp discussion in the selection of the place of meeting, many preferring Washington, as next year will be the centennial anniversary of the discovery of vaccination. The following officers were selected: *President*—Beverly Cole, of California; *Vice-Presidents*—Dr. Chisolm, of Maryland; Dr. La-grange, of Texas; Dr. Clarke, of Mississippi, and Dr. Satterwhite, of Virginia; *Secretary*—Dr. Woodbury of Philadelphia; *Treasurer*—Dr. H. P. Newman, of Chicago; *Address on Medicine*, by Dr. Osler, of Baltimore; *Address on Surgery*, by Dr. Senn, of Chicago; *Address on State Medicine*, by Dr. Rohé, of Baltimore.

The grand decoration has been bestowed upon William R. Warner & Co. by the Belgian Government. The decoration is of the most beautiful, in gold and white enamel, taking the form of a Maltese cross, on the center of which on a blue ground is the inscription. A wreath in blue and gold

surmounts the cross, the whole being topped by a ribbon, tied in a bow, of the national colors. The design is a very pretty tribute for the excellence of the preparations manufactured by this house.

At a meeting of the Faculty of the Northwestern University Woman's Medical School, resolutions were unanimously adopted and ordered to be placed before the Illinois State Board of Health: That, whereas on three occasions within the past three years, the Illinois State Board of Health has licensed to practice medicine in this State, students who have not properly qualified themselves for such duties, and whose incompetence has compelled us to withhold the degree of Doctor of Medicine; that the State Board be requested hereafter to make its examinations so rigid that persons incompetent to obtain the Degree of Doctor of Medicine from first class medical colleges, cannot obtain license to practice from the Illinois State Board of Health; that it be urged to do all in its power to secure a modification of the State law, so that the privilege of examination for license to practice in this State can only be obtained by graduates of recognized medical schools in good standing.

Dr. J. M. Toner, one of the most prominent physicians in Washington, reached his seventieth birthday April 30th. A Washington paper gives an account of a handsome breakfast given by him on this occasion to the gentlemen who were members of the Medical Association when he became associated with it. Breakfast was served at 11:30 o'clock, and from 1 to 3 o'clock there was a reception, to which

all the members of the Medical Association were bidden, and no one else. It was the occasion for a general turnout of the profession, who took advantage of the opportunity to extend cordial greetings and congratulations to one who is so well liked by all. A handsome luncheon was spread with all the delicacies of the season, and in a corner of one of the parlors was a huge bowl of punch. The guests stopped in the corner long enough to

drink their host's health and occasionally returned to do it over again. The rooms were beautifully decorated with flowers. Besides these there were scores of letters and notes of congratulation from this city and elsewhere. A large number of the members of the Association called during the afternoon to pay their respects, and the occasion will probably be remembered by Dr. Toner as one of the most gratifying in his long career.

Reading Notices.

ARISTOL IN OPHTHALMIC PRACTICE. —Diseases of the eye from a promising field for the employment of Aristol both by reason of its antiseptic and cicatrisant properties, its ability to arrest suppuration and act as a protective covering over wounded surfaces. Some time ago Dr. Wallace (*Therapeutic Gazette*) reported a number of cases of interstitial keratitis in which after subsidence of acute symptoms Aristol proved very effective in clearing up the derbis of the inflammation and removing the irritation and congestion of the conjunctiva and cornea. In most instances a remarkably rapid improvement in vision occurred after insufflation of the remedy into the eyes. Corneal ulcers both of traumatic and infectious character have also been successfully treated with Aristol by Bourgois, Viginis and Hegg and according to the two latter authors it has an especially advantageous action in the scrofulous phlyctenular keratitis of children. It was usually employed in the form of the powder dusted on with a brush, while Meurer recommends its use in a 10 per cent ointment in blepharitis and phlyctenular kerato-conjunctivitis. Recently Dr. Heuse of Elberfeld (*Therap. Monatsh.* Feb. '95) has detailed

his extensive experience with Aristol in eye affections. He writes as follows:

"In cases of indolent ulcers of the cornea with purulent base it is occasionally an admirable remedy, causing suppuration of the slough where other remedies have proven ineffective. Aristol was used in the form of a powder, applied thickly to the ulcer with a brush, and the eye was kept closed for a short time after its application. After two days the base of the ulcer had become perfectly cleansed. Aristol, however, does not take part in the reparative process, and after separation of the slough other remedies should be resorted to. In form of a 5 per cent ointment Aristol proved very serviceable in ulcerated blebharitis and on account of its freedom from irritation it possesses some advantages over the yellow oxide of mercury. Of course care must be taken to epilate the diseased ciliae from the ulcerated places. I have also secured excellent results from a 5 per cent ointment in the treatment of obstinate cases of recurring hordeola, (The ointment being rubbed into the ciliae at night.) Aristol, therefore, is a remedy as equal in efficiency as the celebrated precipitate and superior to the latter in suitable cases."

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, JUNE 5, 1895.

NO. 11.

Original Communications.

PRESIDENT'S ADDRESS.

BY JOHN H. TUCKER, M.D., Henderson, N. C.

Gentlemen of the Medical Society of the State of North Carolina :

Permit me to renew my acknowledgments for the honor which was conferred by your partiality in calling me to preside over the deliberations of this old and historic Society, an honor far beyond my merits or deserts, and when I consider the large number of able, learned and progressive physicians who constitute its membership, I am all the more impressed with a sense of my unworthiness for the distinction conferred and the responsibility imposed; but coming as an expression of your choice and a manifestation of your confidence and esteem, I count it the greatest honor of my life, for which I desire to offer you the thanks of a grateful and sincere heart. It is with sentiments of genuine pleasure we accept the privileges and opportunities so graciously afforded us for our meeting here to-day in this beautiful city of Goldsboro, a city so justly noted for the culture, refinement, public spirit and hospitality of her citizens, a city made especially dear to this Society as the home of so many of her true and loyal sons who, by years of active service in her behalf, have made themselves honored and loved by her members. Where else could the North Carolina Medical Society, or, for that matter, any medical society, find an environment more suited to its taste; and where else could our work, the advancement of scientific medicine and the promotion of its usefulness receive greater inspiration than at the home of these worthy gentlemen and accomplished physicians?

The year just passed has not been specially prolific in furnishing new or exciting topics upon which an annual message for the edification of this

distinguished body can be based, nor has recent scientific advances made medical discovery so phenomenal as to justify an infringement upon the work especially set aside for the several sections of this Society.

I may well, therefore, fear that the brief remarks which I may have the honor to deliver may smack of the "thrice-told tale" and leave but little impress upon your minds.

The last meeting of this Society, at Greensboro, has gone into our annals as one of the most brilliant of our series. The attendance was large, showing an increase over former years, notwithstanding the financial stringency of the times, and the proceedings were marked by harmony, unanimity of sentiment and fraternal feelings. The papers offered by the several sections were of a high standard, many of them being productions of real scientific value.

The feature which was especially pleasing to many of the older members, and the one which I desire to enlarge upon and the value of which specially emphasize on this occasion, was the increased number of highly interesting and instructive clinical reports furnished by members from different sections of the State, and which were so collated as to make prominent the anxieties, perplexities, difficulties, failures and successes of the several reporters to the degree of bringing the individual members of the craft in pretty close touch one with the other.

Our North Carolina doctor, from the very nature of his environment, is a typical bed-side observer; he is rich in expedients, methods and devices, and the profession at home and abroad have a right to share in his experience and to profit by his labors. Unlike his more favored city confrère, he has none of the aids furnished by the modern laboratory to smooth out diagnostic wrinkles, or the trained hospital assistants to make easy an hazardous surgical venture, but, solitary and alone, he is often called upon to solve medical problems and to perform dangerous and difficult surgical feats, which would truly be appalling to the prolific brain and skilful hand of the most renowned specialist of the day; that his work is well and successfully done, meeting the high demands of his profession and the still higher demands of the humanities that surround him, the people of every hamlet, village and town in this grand old State stand ready to proclaim his virtues and maintain his cause; truly "the poor, maimed, halt and blind" have received the healing influence of his touch; that his work is worthy of publication and permanent registration, he begs you to consult the report made at our Raleigh meeting, the only attempt yet made to collect and tabulate the work of North Carolina's surgeons in civil practice, and short and incomplete as the author declares the report to be, it records an amount of surgical work which for brilliancy of conception, skill in execution and successful results, will stand all the tests for favorable comparison with any other section in this great country.

No wonder, in the discussion of this admirable resumé of North Carolina's surgeons, a gentleman imbued with sentiments of lofty love of his State and her people and a just pride in the achievements of his brothers, should declare that the "result only emphasized the fact that there is no longer a need for our people to go beyond the limits of the State for surgical operations." Many of the older members recall with pleasure and pride the day when our clinical work was in the lead, the brilliant contributions made by the late Drs. Manson, Norcum, Satchwell, Faison, Murphy, the Haywoods, Thomas, Wood, and others, men of intellectual candor and vigor, who were wont to bring from the riches of their experience cases illustrating their failures as well as their successes, and in the spirit of the conscientious enquirer for truth, would invite the fullest and freest discussion, and, if need be, the severest criticisms as regards diagnostic and therapeutic methods.

Let us have a revival of this work in order that this Society may receive the lessons of instruction and wisdom which the clinical experience of our own physicians and surgeons can so abundantly impart, and to that end I respectfully recommend that additional time shall be allotted to the two sections on the "Practice of Medicine" and on "Surgery," and that it shall be made an especial part of the work of the chairmen of these sections to secure, as far as may be practicable, such reports for the discussion of the Society.

A comparison of cases and an interchange of views by the profession leads to more careful collection and registration of facts, induces closer methods of observation and establishes a wider range of thought, the effect of which is to eradicate petty jealousy and narrow prejudice and in their place to substitute "generous rivalry and personal friendships," the aggregate of which is to unify and ennoble our calling and to bring incalculable benefit to the thoughtful and well poised physician. Our profession has won its grandest and most lasting triumphs through such agencies, and, despite the rapid and almost marvellous acquisition of knowledge in the several branches, the end is not yet, nor will it come until the misty chapter over which etiology presides is forced to disclose many of her hitherto unfathomed mysteries, until by our more philosophical method of studying physiology, pathology and chemistry, and the more recent science of bacteriology, together with the knowledge gained from vivisection and along other lines of experimental research, we shall have collected scientific data of sufficient strength to free medicine from the thralldom of ignorance, superstition, cheap empiricism and fatuitous guessing which for centuries has hampered its progress and restricted its usefulness.

Medicine lays no claim to deductive science—we do not start from axiomatic principles and reason to conclusions. It is highly inductive. Our facts are collected (the greater the number the more certain the escape from error) we arrange them in orderly sequence and from such data we evolve

principles which are being constantly refined and strengthened by the marvellous activities in the profession and the ready application of discovery and invention from every department of human endeavor which can be made useful for the cure of diseases or the promotion of human health. "To-day," says a writer of international fame, . . . "we view its votaries engaged, some searching for new facts and new materials, some studying new applications and better use of facts and materials already known, . . . some are searching the field, the forest, the earth and air, both for more knowledge concerning the causes of diseases and for additional remedial agents; some are in laboratories with crucible, test-glass and microscope, analyzing every morbid product and every remedial agent, separating the active principles from the crude materials and demonstrating their action upon living animals, while far the greater number are at the bedside of the sick and wounded, applying the knowledge gained by all other workers to the relief of human suffering. A more active, earnest, ceaseless and beneficent field is not open to your view in any other direction or occupied by any other profession or class of men."

The system of collective investigation, experimental research and true inductive reasoning has added a great store to our knowledge of the laws of life; pathological deductions have been made clear, and our therapeutic agencies have been placed upon a more rational and scientific plane—further and more enduring progress along these lines impose a grave responsibility upon our organized medical and other scientific bodies.

Time-honored tenets, theoretical dogmas and ingenious doctrines will not down at the mere bidding—they hold to their dynasty with boldness, and complete dethronement is accomplished only by demonstrable truths, logically deduced, and in no field can this work be more effective than through the medium of scientific discussion in the medical bodies of this and other countries. The duties of the hour forbid further generalization and suggest that I shall speak to you of matters of more immediate concern and graver import to the profession and people of North Carolina, and to that end I desire to ask your attention, briefly, to a consideration of some of the obligations resting upon our profession, and especially upon this Society, in the line of the prevention of diseases. I trust no apology will be deemed necessary by this body of progressive physicians for suggesting methods by which their work may be diminished rather than increased. Industrial corps, labor unions, farmers alliances and other like organizations view with grave suspicion the action of a member who would by any method hinder or lessen the business activities of their orders, but modern medicine under the new era, the medicine in whose service we are enlisted and at whose shrine we bow, speaks in no uncertain tone when the physician is sent forth to prevent disease, lessen sickness and prolong human life, and no priesthood proclaims a purer gospel than the simple and unselfish creed of him who wards off and

prevents the disease for the cure of which he would receive fame, fortune and power.

The late Professor Flint, the great teacher, the profound author and America's greatest physician of his day, in a posthumous address prepared for the British Medical Association of 1886, says: "The medical profession shall have reached an high ideal position when the physician, guided by his knowledge of diagnosis, the natural history of diseases and existing therapeutic resources may, with neither self-distrust nor the distrust of others, treat an acute disease by hygienic measures without potent medication. When this time comes a system of practice which assumes to substitute medical dynamics for the *Vix Medicatrix Naturæ* will have been added to the list of by-gone medical delusions."

Again, about the same time, the late Professor Samuel D. Gross, America's great surgeon, and the peer of any surgeon in the world, in his last public address, spoken at the dedication of the McDowell monument, says: "The great question of the day is not this operation or that, not ovariectomy, or lithotomy, or an hip-joint amputation, which has reflected so much glory on American medicine, but preventive medicine—the hygiene of our persons, our dwellings, our streets, in a word, our surroundings, whatever and wherever they may be, whether in city, town, hamlet or country.

"This is the great problem of the day, the question which you, as the rising generation of physicians, should urge in season and out of season upon the attention of your fellow-citizens, the question which, above and beyond all others, should engage your most serious thought and elicit your most earnest coöperation."

In full touch with these sentiments, which have come to us as a blessed heritage from men who have brought renown upon modern medicine—one representing the medical and the other the surgical thought of the day, and both crystallizing their views in an appeal for hygienic and sanitary reform and a more rigid observance of all that may be embraced in the generic term of preventive medicine, it is not surprising that this Society, under the leadership of the late Dr. Thomas F. Wood and a few faithful coadjutors, should have organized a Board of Health and sent it upon the mission of preventing disease, collecting vital statistics and teaching the people the benefits and blessings which come from a wise observance of sanitary rules and regulations.

It would be interesting to study the history of this Board, its struggle for existence, difficulties of securing public confidence, and still greater difficulty in disseminating sanitary teachings among the people, and that, too, under the most brilliant leadership which any service could possibly command, suffice it to say it has grown from a mere committee of this Society into an active, useful and indispensable part of our State governmental system. and is to-day, in its work of preventing disease, lessening sickness and prolong-

ing human life, accomplishing a service which entitles it to the admiration of this Society and the confidence and support of the people of the State. This Board comes to us in conjoint session for conference, for encouragement and support, and the question which naturally arises is, Are we giving it the support which its relation towards us and the important interests it has in hand demands, and if not, why not?

Let us for a moment consider the question of vaccination. For many years past the worthy Secretary of the Board of Health has reported to this Society an increased indifference on the part of the profession and the people to this great preventive measure, and in a recent session he announces from the floor of this Society that, in his belief, nothing short of a visitation of an epidemic of this dread disease, small-pox, in our borders will arouse the people to the sense of their danger and impress upon them the necessity for vaccination. We have no statistical data upon which to base an opinion, but a conservative estimate would leave more than one-half of our people, ages and classes considered, without the benefit of this great prophylaxis, and when we consider the increasing number of epidemics of small-pox occurring in the more populous eastern States, the increased facilities for travel and the changed habits of our people with regard to travel, many thousands going and returning from the great centres of population, thereby subjecting themselves to the danger of contracting a disease which, once set on foot in our State, will grow into a conflagration more appalling, if possible, and more difficult of suppression than a prairie fire in mid-summer, we may well counsel together about matters of prevention.

This body is too technical for any exhaustive arguments in defence of the utility of vaccination, but in view of the existing apathy and the urgent necessities of the situation, I trust you will excuse some references along these lines. Medical and sanitary scientists teach to-day that small-pox is absolutely within the power of man to repress, and that a death from this disease shows criminal carelessness and should be charged neither to the ignorance of man nor the providence of God.

Standard medical authorities and current medical literature teem with indisputable proof that when compulsory vaccination is enforced, small-pox enjoys no lease of life and is scarcely known in mortality reckonings. In epidemics of small-pox it is a well-ascertained fact that the mortality in non-vaccinal cases is from 40 to 51 per cent., whereas in post-vaccinal cases it is only about 4 per cent., and yet, in spite of these convincing proofs, the anti-vaccinists, whose opposition is founded on ignorance and prejudice and whose arguments are supported by factitious statistics and misleading statements, flaunting their unallowed colors in the very face of our profession, assert that we suppress the truth as regards the frightful mortality and enormous sickness which attends vaccination, its complications and sequelæ. It is amazing that in this intelligent age there should be people in North Carolina who are

imbued with these sentiments! Physicians everywhere, of large experience, have seen vaccinal complications, but very few have seen death or permanent injury result from them, and none have ever seen "frightful mortality" and enormous sickness result.

Dr. Quine, in a recent address before the Medical Society of Illinois on this subject, shows that in the city of Chicago there were one million of vaccinations with only two deaths which could possibly be ascribed to the complications of vaccination, furnishing a mortality too trifling to give the opposition any standing in a count of physicians. Again, the Germans to whom our profession is so largely indebted for having directed our study of infectious and contagious diseases along rational lines, in an official report to the German government, in 1890, report 2,485,483 vaccinations without a single death.

But I will not tire you further with exposition along this line. The consensus of medical and sanitary opinion, in which this Society will heartily join, is that vaccination and re-vaccination affords absolute protection against small-pox, and when properly done, with pure vaccine lymph, there is positively no danger of death, serious sickness nor hurtful consequence from the operation, its complications or sequelæ.

In the sparsely populated condition of our State it would be impracticable to enforce compulsory vaccination, the law would be cumbrous, expensive and difficult of execution; but we can and should secure the enactment of a law making it compulsory in our public schools; indeed, we might go a step farther, and make a certificate of vaccination a prerequisite to entrance in any school whose doors are opened for public patronage, and we as physicians who are charged with the sacred duty of maintaining the health and promoting the well-being of the people, should resort more frequently to vaccination in our own private practice, remembering that the best "starting point" is at the physician's own household; through these combined agencies, in a few years, we may hope to have the larger portion of our people brought under the influence of this great prophylactic measure, and thus aid our Board in the accomplishment of a work which has occasioned so much anxiety.

The subject of tuberculosis is to-day one of the gravest with which the physician and sanitarian has to deal, and the necessity of lowering its frightful mortality by methods of prevention was never more keenly felt by our profession—a disease which, we are told, is responsible for one-seventh of the deaths from all causes in the world, furnishing an annual mortality greater than from all the infectious and contagious diseases combined, not excepting yellow fever and cholera, and rapidly increasing in our own State, especially among the working classes, will naturally engage your most serious consideration and elicit your most earnest efforts in the line of its prevention.

Since the publication of Dr. Robert Koch's classical paper, in 1882, announcing the discovery of the tubercle bacillus and demonstrating its generic relation to disease, there has existed but little doubt in the minds of sanitary scientists that this disease should be properly grouped with the infectious and contagious class and brought under the surveillance of our health authorities, in order that aggressive measures may be instituted for its restriction. In a recent publication one of the most distinguished of our American sanitarians briefly summarizes his views as follows:

1. Tuberculosis is a communicable disease and is distinctly preventible.
2. It is acquired by direct transmission of the tubercle bacillus from the sick to the well, usually by means of the dried and pulverized sputum floating as dust in the air.
3. It can be largely prevented by simple and easily applied means of cleanliness and disinfection.

It is upon these propositions that the sanitary and health authorities of the country invoke the aid of our profession in devising means and instituting measures for restricting and lessening the frightful ravages of tuberculosis, and the mandates of professional honor and duty alike suggest a ready and willing response to the appeal.

The remedy is largely educational—the people must be taught, by publication, by lectures, by conference, public and private, in season and out of season, the true character of the disease, the danger of contagion, the source of infection, the method of disinfection, and, above all, the urgent need for rigid hygienic and sanitary treatment, personal and domiciliary, and in no way can this work be made more effective than through the medium of the faithful and conscientious family physician.

These questions are worthy of your most serious consideration, for they involve grave responsibilities and are important enough to command the best executive ability and the profoundest medical and sanitary knowledge.

The methods instituted by our health authorities and now generally practiced in our villages and towns for the restriction of scarlet fever and diphtheria, namely, notification, isolation and disinfection, together with more intelligent, persistent and systematic efforts at disinfection in typhoid fever and other zymotic diseases, have been the means of preventing an enormous amount of sickness and suffering, and doubtless of saving innumerable lives.

The more intelligent of our people everywhere are beginning to realize the value of this service, and the time seems most auspicious for carrying forward our standards, and by public addresses, lectures, sanitary conferences and other agencies to create in the public mind a sentiment commensurate with the great interests involved—at least, as educated and progressive physicians, let us demonstrate to the people the necessity for, and the value of, public hygiene and sanitation, and that as a science it is something more than a mere "jumble of unproved" hypotheses. Lord Derby, years ago, declared

that "no sanitary improvement worth the name will be effective, whatever acts you pass or whatever powers you confer on public officers, unless you create an intelligent interest in the matter among the people at large;" and this eminent authority further says: "With a low average of public health, you will have a low average of public morality and probably also of public (or national) intellect." The physical, moral intellectual and material well-being of all classes of our people will be promoted by an enlightened administration of public hygiene, and in no other direction will an expenditure of labor, time and money give returns so immediate and of such immeasurable value.

If we were to apply the money test as to the value of each citizen who dies from a preventible disease, as suggested by Dr. Farr and corroborated by other sanitarians, it would constitute a sum so large that capitalists would be startled. It is enough to say that the amount saved to the State, as thus demonstrated, would be so enormous that the most visionary dreams of speculation can offer nothing so alluring; but this side of the question belongs to the political economist, and not to the physician.

We promise as the result of our labors diminished sickness, improved health, increased longevity and the resultant blessings of happy and cheerful homes for the people of our State.

Statisticians tell us that the duration of human life has been advanced from twenty-eight and below to forty-one years under the ordinary workings of sanitary laws, and under more enlightened measures, that if mortality can be reduced to fifteen per thousand and maintained at that point, the rate will be advanced to fifty-four years; and if we can reach eight per thousand, as suggested by the distinguished Dr. Richardson in his beautiful picture of the ideal city of Hygeia, with her broad streets, lovely courts and faultless drains, her extended parks, silvery lakes and pure water, with a population "moral, cultured and intelligent," we will carry the rate up towards ninety. Hygeia is a city of the Millenium and these hopes are purely ideal and not within the range of present possibilities, but they are none the less valuable as pointers to the modern sanitist. Who can be more sensible of the value of sunshine, of fresh air, of pure water, of wholesome food, of effective drainage, of cleanliness and of thorough disinfection than the educated physician, and who can better impart this knowledge to those who anxiously look to him for guidance in matters affecting their health, happiness and well-being?

As members of a noble profession, and especially as members of this great and useful Society, let us carry forward the beneficent work; the soil is fertile and needs but the touch of the master hand to give forth an abundant harvest of good works.

In conclusion, my distinguished predecessor, in his able and instructive message, dealt so specifically with the needs and changes necessary for the

improvement of the work of this Society, and these valuable suggestions are still fresh in your minds, that I need say but little along this line.

I desire, however, to urge the importance of the recommendation for a change in our Constitution so as to give the Society a "Recorder and Librarian," whose office shall be at our capital city, and who shall be the lawful custodian of the Society's rolls, books, periodicals, instruments, pathological, anatomical and other specimens which may be donated or otherwise acquired," and to perform such other duties as may from time to time be imposed by the Society.

The necessity for this office is urgent, and it is believed, under proper administration, it may be the nucleus from which a great and valuable medical library will grow, and, under enlightened legislation of the future, we may, with some reason, hope to see established and maintained in connection with it, largely by State aid, a modern laboratory for biological and pathological work, and thus supply a want which is so grievously felt by the profession in the State. I desire, also, to direct your attention to the valuable service rendered this Society, the profession at large, and the general public, by our Committee on Legislation, supplemented by aid of the President and Secretary of the Board of Health and other prominent members of the Society before the committees of the last memorable Legislature. But for the active, persistent and intelligent efforts of this committee, our medical and health laws would have been greatly weakened, if not entirely abrogated, as a trifling tribute to the rapacious demands of the new apostles of political freedom.

I respectfully recommend that this, or a similar committee, shall be appointed, and that it shall be made the duty of the Committee on Nomination to form the committee.

The Committee on Necrology will furnish the names of our departed brethren, and later in the session will seek occasion to offer loving tributes to their memory. The list is not a large one, but it contains the names of several prominent and useful members, one of whom, Dr. Robert Lee Payne, of Lexington, achieved the highest honors of this Society, and was ever active and ready in extending its influence and promoting its usefulness.

They have all measured out honorable and valuable lives in their several spheres, and in passing from the scenes of active, busy strife of this life to the life beyond, they are, under the bidding of the Great Physician, "now resting from their labors."

Society Reports.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Forty-Second Annual Meeting, held in Goldsboro, May 14, 15, and 16, 1895.

FIRST DAY—MORNING SESSION.

The Forty-Second Annual Meeting of the Medical Society of the State of North Carolina was convened in the City of Goldsboro on the 14th day of May, 1895, in the Opera House.

The Society was called to order at 10 o'clock by Dr. W. H. H. Cobb, chairman Local Committee of Arrangements, Dr. John H. Tucker, of Henderson, the President, occupying the Chair, and Dr. Robert D. Jewett, of Wilmington, being Secretary.

Prayer was offered by the Rev. Mr. McQueen.

The Mayor of Goldsboro welcomed the Society in a brief, but most cordial speech.

Dr. W. J. Jones delivered the following

ADDRESS OF WELCOME.

Mr. President and Gentlemen of the Medical Society of North Carolina :

The presence of your learned and distinguished body in our city emphasizes an event of which we feel proud, and to which in after years memory will revert with pleasurable reminiscence. In your annual pilgrimage, after the cycle of many years, you once again appear at our gates, and in behalf of the local fraternity our excellent Lord Mayor and Board of City Councilmen, with warm hearts and ready hands we extend a hearty greeting and cordial welcome to the hospitalities and privileges of your chosen Mecca, which we trust to make enjoyable during your temporary stay in our midst.

Coming, as you do, from the various sections of our grand old Commonwealth—some from her rock-ribbed mountains, upon whose majestic peaks are daily coronations by mingled cloud and corruscating sun-rays—others from near the blue waters of the Atlantic, whose rippling billows awake with their splashing laughter the sunbeams of morning—and others again from our own beloved plains. And while unable to excite your admiration and awe with enchanting scenery of picturesqueness and grandeur afforded by mountain and sea, still they come with radiant smiles and joyous hearts born of the inspiration of nature around them; and would point you to the Goddess of Plenty, whose cornucopia is ever replenished by this propitious climate and prolific soil; also, as typical of their aspirations, they have in their forests

the tall and majestic pine, that sways its lofty head when fretted by the gusts of heaven and bids defiance to the storm-clouds, and yet bows complacently at the rage of an impotent foe—even political—as in Goldsboro and the county of Wayne. Yes, gentlemen, during your short respite from laborious professional work, we trust that while in our city your enjoyment will be commensurate with our esteem and appreciation of your distinguished body.

Mr. President, the scientific guild over which you have the exalted honor to preside on this occasion (it being your forty-second annual session) is comparatively but a small contingent of the grand army of co-laborers in the ever progressive and widening domain of medical science. With the population of seventy millions in the United States of America we have one hundred and five thousand, one hundred and eighty-three practicing physicians, and we hope, sir, that the physicians and surgeons of your learned body will not in the future, as in the past, be content, with their God-given talents, to merely swell the overflowing mediocrity of their profession, but achieve and maintain the highest standard of professional excellence. By earnest and persistent determination to surmount all obstacles, ever keeping your eyes toward the summit of professional eminence, where, inscribed in living light, are the immortal names of the illustrious members of your profession, you may in this way hope to reach the goal or upper rungs in the ladder by which alone you may expect to enter the Temple of Fame, possessing wealth and happiness, and in the "yielding stone of time" have your fondest dreams engraved.

Within the last two decades the advancement in the science and art of your ennobling profession has been marvellous indeed, and should cause us most reverently to proclaim our gratitude to a merciful God for the discovery and utilization of inexhaustible resources which are of incalculable benefit to suffering humanity.

While it is true that your progress has been phenomenal, and that clinical demonstration of advanced methods in surgery and rational medicine has enabled you to hold in leash the terrible scourges that ever and anon are wont to invade and decimate the bright and beautiful habitations of man, yet you must confess not infrequently your utter inability to successfully resist or capture the invading foe, "and with sad entreaty invoke the mystic elixir vitæ" of a Paracellus or the heavenly electrified Pool of Bethesda, by the touch of whose agitated waters the demon of disease is instantly expelled.

Mr. President, the grave responsibility resting upon our profession makes it no sinecure; its labors are various and constant, its toils unrelaxing, its cares unceasing.

The physician is expected to meet the grim monster, "break the jaws of death and pluck the spoil out of his teeth." His ear is ever attentive to entreaty, and within his bosom are concealed, sacred and inviolable, the disclosures of the suffering and dying. Success may elate him, as conquest flushes the victor.

Honors are lavished upon the brave soldiers who, in the struggle with the foe, have covered themselves with glory and returned victorious from the field of battle, but how much more brilliant is the achievement of those who overwhelm disease, the common enemy of mankind, whose victims are numbered by the millions. Another paramount duty of the physician as a public benefactor I will suggest by submitting the postulate that if the stability and maintenance of good and permanent government depends upon the virtue and intelligence of its people, it is imperatively necessary to foster and secure the health, strength and physical development of succeeding generations of a

stalwart and vigorous yeomanry, who cannot only defend and perpetuate government, but become fathers and mothers of statesmen, philosophers and warriors—men who can say ambition has no height where genius and talent may tread that has not felt the impress of their feet.

And now, in conclusion, Mr. President, we would repeat our welcome to your distinguished fraternity of scientific workers, hoping that your session in Goldsboro shall have accomplished much for your organization, much for the profession of medicine, much for suffering humanity, much for the world, much for yourselves. May Heaven's choicest blessings be in store for you! May you live to enjoy long, useful and happy lives! May the hand of Fate bestow on you fame, wealth and happiness; and, finally, sir, may the North Carolina State Medical Society live in the love of science and fellowship until that God whose means and ends are love shall decree that they shall end on earth, but still may love and fellowship guide you through the pearly gates into the eternal city.

On behalf of the Society Dr. C. J. O'Hagan, of Greenville, 'made the following

RESPONSE.

Mr. Mayor, Ladies and Gentlemen :

My friend, Dr. Cobb, has given me such a wonderful send-off here I'm afraid that you will expect far more than I am able to give you; and after the eloquent and warm address of welcome we have received I find I have no language sufficient to express the feelings that animate this body.

I'm a plain, blunt man, not gifted with a set phrase of speech, one whose days and nights are occupied with sick beds in work, and I regret at this time that I am not gifted with the necessary powers of speech to express in sufficient terms the feelings and gratitude that we feel toward the Goldsboro people to-day, not that it is strange to me, for I knew it before—I knew it when it was a way station, and should I have not seen it from that time until the present, I would have been astonished at the wonderful growth; at your wide and spacious streets, showing that the sanitation of the place is attended to; at the wonderful industrial works; and, above all, the enlightened system of education which you have provided for the youth. All these testify to the energy of the public spirit and the munificence and magnificence of the people of Goldsboro. And among all the triumphs, industrial and other, none can possibly compare with the educational institution which you have here in your midst—the Goldsboro Graded School. All other achievements, in my judgment, sink into insignificance compared to that. As the English poet Gray, in his *Elegy upon the Church-yard*, speaks of "full many a flower born to blush unseen," so many a flower which would have withered under the blighting hand of penury, will arise and, in years to come, will shed glory not only upon the town which has bestowed these educational advantages, but upon the whole country to which we belong.

But while thinking of these triumphs I cannot but refer back to the past and wish that I could see here, among the many faces which surround me, the many friends who have gone before. I think, also, of the many gallant soldiers who have gone from this town, of the brave Goldsboro Rifles, who, among thousands of others, gained and held the fame and glory of North Carolina bravery. And can I forget that gallant band of cavalry, that first cavalry to which I had the honor to belong, and the gallant Tom Ruffin, the purest and best and noblest man of the many with whom I have been ac-

quainted? There is a beautiful custom in the French service: After the days of the first revolution of France, when the Grenadier Guards came to the front for review, they called out the name of the best and oldest Grenadier, and his name was Lateur De Verne. Some one stepped forward, and, with a shout, proclaimed, "Dead upon the field of battle;" and when the name of Thomas Ruffin is called the answer comes, "Dead upon the field of battle," a cavalier without fear and without reproach, an honor to any service and a leader of men, one of whom the Roman legionaries and the guard of the great Emperor himself were not superior.

And now, ladies and gentlemen, at the risk of being tedious, I will bring my few scattered remarks to a close, and in the name of the Medical Society of North Carolina thank you, again and again, for your generous and hospitable welcome.

The Committee of Arrangements announced that an entertainment would be given to the Society in the Opera House that evening.

The Society was now called to order by the President for the transaction of business.

The plan followed at the meeting in Greensboro of allowing 20 minutes for the reading of a paper and 5 minutes to any member in the discussion was adopted for this session.

The following Committee on Credentials was appointed: Drs. W. H. H. Cobb, R. H. Whitehead and Albert Anderson.

Drs. W. J. Jones, R. J. Noble and W. C. Galloway were appointed the Committee on Finance:

The roll was called by the Secretary.

The President's Address was now read before the Society and a number of the citizens of Goldsboro. (See page 277.)

On motion, the thanks of the Society were extended the President for his profitable and interesting Address, and it was referred for publication.

The members of the Society were invited to visit the Eastern Hospital by the Superintendent, Dr. Miller.

The Society adjourned till 3 o'clock.

FIRST DAY—AFTERNOON SESSION.

Society called to order by the President at 3 o'clock.

The Committee on Credentials introduced Messrs. John H. Hill, H. C. Shannon and C. B. Miller as Delegates from the North Carolina Pharmaceutical Association, who were welcomed by the President.

Dr Albert Anderson read a paper on "Diphtheria Antitoxine," which was referred to Committee on Publication. (See later issue.)

The Committee on Credentials made a partial report. (All reports from this committee will be embraced in one which appears in proceedings of last day.)

Dr. P. L. Murphy, of Morganton, next read a paper entitled "Care of the

Insane and Treatment and Prognosis of Insanity." Referred to Committee on Publication. (See later issue.)

Dr. Hays read a memorial sketch of the late Dr. R. L. Payne, prepared for the Guilford County Medical Society. It was referred to the Obituary Committee.

Upon motion, Dr. Julian, Secretary of the Davidson County Medical Society, of which Dr. Payne had been a member, was requested to read a memorial of Dr. Payne. The paper was referred to the Obituary Committee, and ordered by that Committee to be incorporated in their report.

Dr. Bahnson presented a paper by Dr. A. R. Wilson, Chairman of Section on Physiology and *Materia Medica*, which was read by title and referred to the Committee on Publication.

Dr. J. G. Blount, of Washington, read a paper on "Anæsthesia," which was referred to the Committee on Publication. (See later issue.)

Dr. A. W. Knox, Chairman of Committee on Legislation, made his report.

Upon motion, the report was accepted and a vote of thanks was extended to the Committee on Legislation, to Dr. Lewis and to all others who had looked after the interest of the Society and of the people of North Carolina by preventing the enactment of unwise laws.

Dr. R. H. Whitehead, of Chapel Hill, read a paper entitled "A Case of Multiple Perforation of the Small Intestines," which was referred to the Committee on Publication. (See later issue.)

Dr. H. A. Royster, of Raleigh, gave an instructive and interesting practical "Demonstration of a New Method in Applying Plaster-of-Paris Dressing in Fractures."

The Society was very much gratified with the demonstration by Dr. Royster, and referred the paper to Committee on Publication. (See later issue.)

Dr. S. J. Montague, of Winston, read a paper entitled "A Report of a Case of Chronic Purulent Otitis Media." Discussed by Dr. R. H. Lewis and referred to the Committee on Publication.

The following Committee on the President's Address was announced: Drs. J. W. McNeill, W. H. Harrell and J. L. Nicholson.

An invitation from the Y. M. C. A., extending the use of their Halls to the Society, was read and the thanks of the Society returned.

Society adjourned till 9: 30 a. m. Wednesday.

SECOND DAY--MORNING SESSION.

The Society was called to order by the President at 9: 30 o'clock.

The following Committee on Nominations was appointed: Drs. R. S. Young, P. L. Murphy, W. H. Cobb, Jr., F. R. Harris and J. B. H. Knight.

Committee on the Duffy Prize Essay made the following report, which was adopted:

Your Committee on Award of the Duffy Prize beg leave to report that two papers were submitted in competition for the prize; that we have given a careful examination to both papers, both separately at our respective homes, and conjointly as a committee after reaching Goldsboro, and that we have reached the following conclusions:

1. Neither essay gives the botanical descriptions with sufficient accuracy to lead to the identification of the remedies named.

2. Neither paper gives the physiological actions and therapeutic indications for the proposed remedies with sufficient detail.

Therefore, while both essays are creditable, your Committee does not think that either attains that high order of merit which your Society demands and which would entitle it to the award of a prize.

We desire to say, also, that we have not opened the sealed envelopes which contain the real names of the respective writers of the papers, and that, therefore, their incognito is preserved.

We have delivered the papers to the Secretary of the Society, and their owners can secure them from him, if they so desire.

Respectfully submitted,

R. L. PAYNE,	} Committee.
A. W. KNOX,	
A. CHEATHAM.	

Dr. A. A. Kent, Leader of Annual Discussion, opened the discussion by reading a paper on "The Abuse of Alcoholic Stimulants in Practice." (See later issue.)

Dr. Picôt asked the pleasure of introducing to the Society the distinguished Professor of Surgery in the Jefferson Medical College of Philadelphia, Dr. W. W. Keen, who was invited to the courtesies of the floor.

Dr. R. H. Whitehead read a paper entitled, "The Anatomy of Hernia with Reference to Vacewan's Operation," which was referred.

Dr. C. O'H. Laughlinghouse read his report as Chairman of the Section on Anatomy and Surgery, entitled "Something of Surgery up to Date." (See later issue.)

Discussed by Drs. W. W. Keen and H. T. Dahnsen and referred to the Committee on Publication.

Dr. W. J. Jones offered the following report of the Finance Committee:

To the Medical Society of the State of North Carolina:

Your Committee on Finance having examined the books and accounts of the Treasurer, beg leave to make the following report:

Balance on hand, May 15th, 1895.	\$1,307 41
Amount paid out on vouchers to date	692 40

Balance on hand,	\$ 615 01
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The committee recommend the usual assessment of \$2.00 per capita for the

ensuing year, and that the salaries of the Secretary and Treasurer be the same as for last year.

Respectfully submitted,
W. J. JONES,
R. J. NOBLE,
W. C. GALLOWAY.

Dr. J. W. Long read a paper on "Surgical Technique," illustrating his paper with photographs and specimens of dressings, etc. Referred to the Committee on Publication.

Dr. R. H. Lewis stated that the law required the Society to furnish books for the registration of physicians by the county clerks, and that the first supply was exhausted. He moved that a committee be appointed to have a lithograph plate made for printing these forms and that a sufficient number of books be printed.

Motion prevailed, and the Chair appointed as the Committee Drs. R. H. Lewis, R. D. Jewett and A. W. Knox.

Dr. Lewis announced that the name of Dr. Thomas Fanning Wood had been placed upon the portrait presented by the Society to the State Library and the portrait placed in position. The report was received and the committee discharged.

Dr. R. L. Grainger, a member of the New York Medical Society, was introduced by Dr. Bahnson and extended the courtesies of the floor.

The committee appointed to consider the wisdom of establishing the office of Librarian made the following report, which was adopted:

Your committee to whom was referred, at the Greensboro meeting of the Society, the matter of the disposition of the "books, exchanges and other valuable periodicals of the Society," do respectfully recommend that the Secretary of the Society be, and he is hereby, instructed to deposit the same in the library of the State University at Chapel Hill, where they may be consulted by the pupils of the Institution, members of this Society and other members of the profession, when desired, under the rules and regulations governing the use of other books in the library of said University; *provided* that the said books be accepted by the University as a loan.

Respectfully submitted,
J. HOWELL WAY,
H. T. BAHNSON,
T. S. McMULLAN.

Adjourned to meet at 3 o'clock.

SECOND DAY—AFTERNOON SESSION.

Session called to order at 3 o'clock by the President.

Dr. D. T. Tayloe read a report of surgical cases as follows: "Interstitial Fibroid—Removal by Supra-pubic Hysterectomy"; "Removal of Uterine Appendages for Disease"; "Osteotomy for Angular Deformity After Fracture of Tibia and Fibula."

Referred to the Committee on Publication.

ELECTION OF OFFICERS.

The hour having arrived for the election of officers for the ensuing year the President called for nominations for President.

In a neat and complimentary speech, Dr. W. H. H. Cobb nominated Dr. R. L. Payne, of Lexington.

There were no other nominations, and, on motion, the Secretary was instructed to cast the vote of the Society for Dr. Payne, whereupon he was declared duly elected President of the Society for the ensuing year.

The following Vice-Presidents were nominated and unanimously elected: 1st Vice-President—Dr. S. D. Booth, Oxford.

2d “ “ —Dr. J. P. Munroe, Davidson.

3d “ “ —Dr. J. A. Burroughs, Asheville.

4th “ “ —Dr. J. E. Grimsley, Snow Hill.

Nominations for Secretary being in order, Dr. Robert D. Jewett was placed in Nomination, and there being no further nominations, the Treasurer was requested to cast the vote of the Society for him, and he was declared elected.

Dr. M. P. Perry was placed in nomination for re-election to the office of Treasurer, and, on motion, the Secretary was requested to cast the vote of the Society for him, and he was declared unanimously elected.

Dr. J. A. Burroughs read his report as Chairman of Section on Medical Jurisprudence and State Medicine, being entitled “Needed Legislation and a Practical Enforcement of Existing Laws.” Referred to the Committee on Publication.

The Committee on President’s Address offered the following report, which was received and adopted:

The committee appointed to consider the recommendations in the President’s Address, respectfully report as follows:

1st. That his urgent appeal in behalf of the protection of public health from small-pox and other preventive diseases is timely and deserves the most serious consideration from the Society. While we recognize the valuable efforts on this line by our State Board of Health, the magnitude of this question is so great and of such vital importance to the people of our State, we urge the Society, as a body, and its members as individuals, to aid in every way the carrying into effect the President’s recommendations.

2d. That we advise the adoption of the recommendation, “That more time be allotted to the two Sections on the ‘Practice of Medicine’ and ‘Surgery.’”

3d. We recommend that the suggestion in reference to the selection of the Committee on Legislation be adopted.

4th. In view of the fact that a committee was appointed at the last meeting of this Society to consider the establishment of the office of Permanent Secretary and Librarian, this committee, while heartily endorsing our President’s suggestions, will make no recommendation in regard to this matter.

J. W. McNEILL,
W. H. HARRELL,
J. L. NICHOLSON.

(*To be continued.*)

AMERICAN MEDICAL ASSOCIATION.

Forty-Sixth Annual Meeting, held in Baltimore, May 7, 8, 9 and 10, 1895.

The first session of the Forty-Sixth Annual Meeting of this Association was held in the Music Hall, on Mount Royal Avenue. It was called to order by the President, Dr. Donald Maclean, of Detroit, at 10:45 a. m.

The opening prayer was delivered by Rt. Rev. William Paret, the Episcopal Bishop of Maryland.

Dr. Samuel C. Chew, chairman of the Reception Committee, then delivered an address of welcome on behalf of the medical profession of Baltimore.

Doctor Donald Maclean delivered the presidential address, taking for his theme, "A Few Living Issues Affecting the History of Medicine and what Came of Them." He recalled briefly certain questions which in their day received the active and interested attention of thinking people. For some years immediately preceding and immediately following the beginning of his professional life, the attention of science and of medical thought was directed toward that renowned centre of medical and general learning, his own alma mater, Edinburgh. A glance at the names which at that time constituted its medical faculty will explain this. They were Syme, Simpson, John Hughes Bennett, John Goodsir, Robert Christison, Lyon Playfair, Mr., now Sir William Turner, who is the only one still remaining of that brilliant galaxy of teachers and philosophers. Such a faculty could not fail to attract interested attention. While it is well known that at Edinburgh a vast amount of extremely valuable work was, in these days, accomplished in all departments of medical science, still there was, in that far-famed school, one man and one question toward which, from every quarter of the civilized world, eager anticipations were directed. This man was James Young Simpson, and the question was, "The use of chloroform as an anæsthetic." Having caught the essential idea of relieving pain by the inhalation of ethereal vapors, from this great nature, devoted all his eloquence, ingenuity and literary acumen to the development and final establishment of the new doctrine. How he succeeded we now know full well.

The issue next referred to was that which ultimately eventuated in the complete abandonment of blood-letting and the so-called antiphlogistic expedients upon which the profession had so confidently relied.

The rise and development of the new art of gynecology, under the leadership of J. Marion Sims on this side and of Simpson on the other, was then recorded. From very insignificant and unpromising beginnings this science has certainly, as we all know, increased and grown, and, in short, passed through an almost miraculous process of evolution.

In this retrospective view of living issues in medical thought, it would be impossible to overlook the important and inspiring one comprehended under

the name of "the cellular pathology." With this page in the history of our science, the great name of Virchow will always be inseparably associated, as its founder and greatest advocate. While the doctrine "*Omnis cellula e cellula*" had not explained all the mysteries of pathology, few can admit that the discoveries of Virchow and his school do not stand out as among the most inspiring discoveries of medicine.

An appeal was made for a remodelling in methods of medical education, and the support of the profession was asked in securing a bureau of health (with an official head in the cabinet). The party, professional or political, which shall succeed in consummating this wise measure will assuredly earn for itself the gratitude and applause of an appreciative nation. The individual citizen who shall materially contribute to the success of this noble, "useful plan," will be justified in congratulating himself on having realized the lofty aspiration of the patriot, as well as the sublime and pathetic "wish" of the poet: "*Homines deos accedunt hominibus dando salutem.*"

Dr. John H. Hollister, of Chicago, read a paper entitled "New Departures in Therapeutics." In order to judge of the medical theories of any age, he said, it is only necessary to study the therapeutics of that age. For many years medical science was compelled to conduct a defensive warfare as we were ignorant of the etiology of morbid processes and were compelled to exhibit our remedies empirically; but the microscope and laboratory have opened up to us fields of great promise, and we now feel the impress of a new era from which will date the renaissance of medicine. The therapy of to-day is aggressive. Twenty years ago the two great therapeutic theories were, first, the cellular, and second, the humoral. At this later day we have, in a sense, made a return to these landmarks, and can now speak of organic therapy, or the therapy of substitution and of the sero-therapy. The former was ably championed by Virchow, and with the latter the name of Behring is inseparably linked. The organic therapy is based upon the fact that all vital activity has a cellular genesis, and that an equilibrium of all these activities constitutes that condition which we call perfect health. Whenever there is an impairment of cell activity we have impaired function, cell degeneration, and, in the worst cases, death. Remedial agents are valuable as they affect cell vitality. Cells have a certain *vis vite* or resistance against morbid processes. They elaborate nucleins, proteids and albuminoids, which oppose the influence of toxic products. Slight cell-irritation increases cell activity. And in their struggle with bacteria they act not as phagocytes, but throw themselves around the invader so as to surround him with more anti-toxin. Cells are supposed to have a selective power of absorption. Hence have arisen a series of nutritive extracts made from various organs. The theory of Brown-Séquard, which was so much ridiculed at first, has now become better understood and followed out in a logical way. With two substances of this latter group the writer has had some practical experience.

He has used red bone-marrow for the past two years for simple anæmia, and has seen better results therefrom than previously with arsenic, oil or iron. He has also used nuclein, though the discovery of this is not a new thing. Vaughan has already shown that there are certain substances which can be extracted from animal tissues, notably the thyroid spleen and bone-marrow, which, when injected into the animal economy seem to have an antiseptic power in the alimentary canal, stimulate the brain and nerves and energize all vital processes. Nuclein seems antidotal to diphtheria, and the cell reaction which is originated by its use increases the nuclein supply of the body.

As to sero-therapy, it is a logical outcome of the germ-theory of disease, which itself grew out of the discovery of cell agency in fermentation, the discovery of living organisms in pus, the conveyance of germs through the air and their appearance in the blood and tissues; then followed culture-work, and, finally, the causative relation of specific microbes to specific diseases. Finally came up the principle of systemic infection from germ-growth over and above the local effect of their ravages. To oppose this physiologically came the discovery of the germicidal power of blood-serum and the establishment of the doctrines of artificial immunization, first proven with respect to anthrax, and now with reference to several other maladies. Important points to decide are the dosage of the serum to be injected, and the fact as to its permanency in our armamentarium.

In the opinion of our German confrères its introduction in diphtheria has reduced the mortality from forty-four per cent. to twenty-one per cent. One observer out of five hundred and twenty-five cases had a mortality of only eighteen per cent., though before the serum injections it had been twenty-one per cent.. At the recent Medical Congress in Munich it was declared to be the sense of the meeting, first, that it is harmless; second, that many observers have seen good results from its use, and third, that as to its prophylactic power, the question is still open.

Several points yet remain unsettled. We do not yet know enough as to the possible globicidal power of the transferred serum to say whether the remedy is perfectly safe. Nor are we well acquainted with the effects and counter-effects of mixed infections. But if infectious diseases are developed by micro-organisms, and if blood-serum is injurious, other means of therapeutic value may yet be found. Edinger, of Freiburg, has noted that the mucous secretions and saliva are distinctly antiseptic, and that both contain a large relative percentage of thiocyanite of potassium. He has combined this substance with quinoline and produced a compound called rhodonate of methyl-pyridine. Solutions of this check the growth of Loeffler bacilli in one hour (1 to 1,000) and that of staphylococcus aureus (3 to 200) in the same time. It is not caustic, as carbolic acid, nor poisonous, as bichloride of mercury.

The discussion of this paper was opened by Dr. W. C. Quine, of Chicago.

He had used the extract of bone-marrow and could give his unequivocal endorsement as to its value in simple anæmia and in cases of apparent progressive pernicious anæmia. In a case of splenic leucæmia it had increased the hæmoglobin eight per cent. and the red cells seventeen per cent. Yet, notwithstanding this, the multiplication of white cells went on with even greater rapidity than before. So that there was a great increase in the volume of the blood by reason of the augmentation of its cellular contents.

In the use of the diphtheria antitoxin he had seen various eruptions, and, in one case, bloody albuminuria, the case, however, recovering. But he had also had some very striking recoveries in cases where laryngeal or nasal involvements were threatened, and it appeared that death would result in a day or two without injections were made. Relief in a few such cases had led him to cherish a distinct regard for the new remedy; nevertheless, it was a gift horse whose merits needed the closest inspection.

Dr. F. B. Turck, of Chicago, had seen good results follow from the use of nuclein in the auto-intoxication which results from gastric disorders. This might show itself as a nervous irritability (neurasthenia so-called) or in a soporific depression leading up to melancholia. The toxins from germ-growth are upon the intestinal walls, and the use of nuclein has seemed to get directly at the cause of the trouble. Especially good effects have been seen in vasomotor excitation ("flashes," etc.) and in patients with agoraphobia. The substance is not a specific, but is a great addition to our therapeutic resources.—*Medical Record*.

CHEAP AND HANDY APPLICATORS.—Dr. John Winslow, of Ithica, N. Y., says that the best short cotton applicators are the common four-sided, double-pointed, hard-wood tooth-picks, costing five or ten cents a thousand. The best long ones, for most purposes, are made of iron wire, flattened with a hammer at the distal end and bent into a ring handle at the proximal. The wire should be flexible enough to be easily shaped by the fingers after winding, and stiff enough to retain the shape so given. Such wires, made by the tinsmith at a trifling cost, may be thrown away after once using, or may have the cotton burned off and be used again. They cannot, of course, replace the flat silver applicator where great pliability is required.—*Ibid*.

AN old gentleman, one hundred and two years of age, living in Maine, recently fell, as he was preparing to shave himself, and fractured the neck of the femur. He claimed that he had not had to seek medical aid before for eighty years.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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This JOURNAL is published on the fifth and twentieth of each month, and any subscriber failing to receive his copy promptly, is asked to announce the fact to this office.

Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

All communications, either of a literary or business nature, should be addressed to, and remittances made by P. O. Order, Draft or Registered Letter, payable to ROBERT D. JEWETT, M.D., P. O. Drawer 810, Wilmington, N. C.

Editorial.

The Goldsboro Meeting.

The Forty-Second Annual Meeting of the State Medical Society, held in Goldsboro, May 14th to 16th, was a pronounced success. The unfortunately late arrival of trains on the main railroads made the attendance at the opening session quite small, but the full attendance, as shown by the registration book, was but little less than that at the Greensboro meeting. The programme was full, and many of the papers were of much scientific value. It is a remarkable fact that, with the exception of the report of the regularly appointed Chairman of the Section on Gynecology, there was not a single paper

presented that pertained to that Section. On the other hand, the sections on Surgery, Practice and Obstetrics were full. Members seemed to have anticipated the recommendation of President Tucker that more time should be allotted to these sections.

Goldsboro was looking her prettiest and her people welcomed the Society with abundant hospitality. Each day was marked by some enjoyable social feature which was thoroughly appreciated by the members. Oh, if the hotels of Goldsboro were only as big as the hearts of her people, there would be nothing to ask for; but they are not. The crowding of eight men into one room, with no conveniences for making

their toilet, will not tempt them to leave comfortable homes to attend future meetings of the Society. The Society is growing to such proportions that the smaller towns cannot accommodate it, and the matter should be taken into serious consideration. The comfortable accommodation of members who attend the meetings is a matter which will affect the growth and welfare of the Society to a certain extent. We believe it would be well, and would meet with the approbation of four-fifths of the members, to have the meetings limited to the five largest towns in the State. These would cover sufficiently every portion of the State, and would ensure comfort to those who might attend.

In the unanimous selection of Dr. R. L. Payne as President for the ensuing year, the Society has bestowed its highest honor upon one of her most deserving members and at a most fitting time, for it was at the Goldsboro meeting, in 1878, that his lamented father occupied the Chair. No one could have been selected who would appreciate in a higher degree the responsibilities of the office, or who would strive with greater energy to advance the welfare of the Society.

The report of the Committee on Legislation shows that the Society has much cause for self-congratulation, and not only the Society, but the profession and people of the State at large, for, while the unsettled condition of affairs at the Capital rendered it unwise to attempt the enactment of several laws that would be of undoubted benefit, much unwise legislation which was introduced was

prevented through the energy of the Committee and a few other friends of the Society.

The American Medical Association.

The anticipation of those who were looking for a successful meeting of the national Association at Baltimore were realized. Baltimore was a fortunate selection as the place of meeting. The registration books showed upwards of a thousand delegates present. Besides these there were many others, but notwithstanding the very large attendance, they were comfortably provided for.

The work done by the various sections was of high scientific merit, and the general sessions provided much that was interesting. It is pleasant to note that all propositions to change the Constitution were promptly tabled. The action of the Trustees in requiring all advertisements in the *Journal*, after expiration of existing contracts, to be accompanied by a formula giving names and quantities of each ingredient, to be printed as a part of the advertisement, will meet the approval of probably a majority of the members.

The names of the newly elected officers, as given in our last issue, were taken from the telegraphic reports and were somewhat mixed. We give them properly below:

President—R. Beverly Cole, of San Francisco.

Vice-Presidents—1st, J. J. Chisolm, of Baltimore; 2d, J. C. Le Grand, of Anniston, Ala.; 3d, A. P. Clarke,

of Cambridge, Mass.; 4th, T. P. Satterwhite, of Louisville, Ky.

Treasurer—Henry P. Newman, of Chicago.

Secretary—W. B. Atkinson, of Philadelphia.

Librarian--Geo. E. Wire, of Chicago.

The Association will hold its next meeting in Atlanta, beginning the first Tuesday in May, 1896. It is needless to say that Atlanta will prove equal to the occasion.

Reviews and Book Notices.

Medical Gynecology. A Treatise on the Diseases of Women from the Standpoint of the Physician. By Alexander J. C. Skene, M.D., Professor of Gynecology in the Long Island College Hospital, Brooklyn, N. Y.; etc., etc. With illustrations. Octavo, cloth, pages 548. D. Appleton & Co., New York; 1895.

Of late years the term "Gynecology" has come to have invariably associated with it, in the minds of the profession, the dilator, the curette and the scalpel. An operation, either major or minor, is the first thought of many when consulted by a woman for some derangement of her generative organs. It is a pleasure, then, that so eminent and successful a gynecologist as Dr. Skene should devote an entire and independent volume to the medical treatment of these disorders. Those who have read after Dr. Skene, or who have heard his able dissertations in the class-room, will welcome this volume with satisfaction.

Part I. deals with the primary differentiation of the sex development and growth during early life, and the conditions favorable to the evolution of normal organization and the attainment of a healthful puberty. In this part are discussed the hygiene

of the growing girl, physical and mental culture and the causes and treatment of derangements of menstruation.

Part II. treats of the characteristics of sex, the adaptation of structure to function, the predisposition to particular diseases and the cause of certain affections peculiar to women. In this part are taken up all the diseases, functional and organic, common to the active functional period of woman's life. These are treated solely from the physician's standpoint.

Part III. discusses the menopause, when the generative organs are passing from their period of functional activity to that of rest. It includes those diseases which are common to women in the latter part of their lives.

The book is well printed on good paper, and the illustrations, though few, are sufficient. We notice an error in the description of Fig. 12, showing the nine spaces of the abdomen. The region above the umbilical is denominated the hypogastric, and the one below the epigastric. However, this is not likely to mislead, especially as the description of

the spaces in the text gives them properly. We feel sure that the present work will attain the same popularity that has marked the other writings of the distinguished author.

The International Medical Annual and Practitioner's Index: A Work of Reference for Medical Practitioners. By Various Editors and Contributors; 1895. Thirteenth Year. E. B. Treat, 5 Cooper Union, N. Y. Price \$2.75.

For the thirteenth time this excellent work has come to lend its aid in placing the busy practitioner on a level with the times. It is a volume of six hundred and forty-eight octavo pages, and is liberally illustrated

when necessary to supplement the text. Part-I. describes the new remedies and gives a review of therapeutic progress for 1894. This includes a chapter on electro-therapeutics and one on anti-microbic treatment. Part II. is a dictionary of new treatment in medicine and surgery for 1894, as gleaned from the best authorities of all countries. Part III. treats briefly the improvements in sanitary science and progress in pharmacy and gives a list of new inventions and new publications. The volume has been kept within the same bounds as the last issue, without injurious condensation.

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From May 2d, 1895, to May 28th, 1895:

Richard, Capt. Chas., Assistant Surgeon, will, when relieved from duty at the Military Prison Fort Leavenworth, Kansas, proceed to and take station at St. Louis, Missouri, for duty as Attending Surgeon and Examiner of Recruits.

Egan, Capt. P. R., Assistant Surgeon, is relieved from duty at Fort Custer, Montana, and ordered to Fort Assinniboine, Montana, for duty, relieving Major Charles B. Byrne, Assistant Surgeon. Major Byrne, on being thus relieved, is ordered to Fort Snelling, Minn., for duty.

Skannon, Maj. Wm. C., Surgeon, upon the expiration of his present leave, is ordered to Fort Custer for duty.

Howard, 1st Lieut. Deane C., Assistant Surgeon, will be relieved from duty at Fort Snelling, Minn., upon the arrival there of Maj. Chas. Byrne, Surgeon, and will then proceed to

Fort Custer, Montana, and report for duty at that post.

Chapin, Capt. Alonzo R., Assistant Surgeon, having been found by an Army retiring board incapacitated for active service on account of disability incident to the service, is, by direction of the President, retired from active service this date, May 10, 1895.

Wakeman, Capt. Wm. J., Assistant Surgeon, is granted leave of absence for four months, to take effect on being relieved from duty at Fort Thomas, Ky.

Waters, Wm. E., Surgeon U. S. Army, is granted leave of absence for one month and fifteen days, to take effect on or about June 16, 1895.

Matthews, Major Washington, Surgeon. The extension of leave of absence on surgeon's certificate of disability, granted Major Washington Matthews, is further extended four months on surgeon's certificate of disability.

Johnson, Capt. Richard W., Assistant Surgeon, is relieved from duty at Washington Barracks, D. C., and ordered to Fort Huachuca, Arizona, for duty, relieving Major Timothy E.

Wilcox, Surgeon. Major Wilcox, on being thus relieved, is ordered to Fort Schuyler, New York, for duty.

Ewen, Major Clarence, Assistant Surgeon. The leave of absence on account of sickness granted Major Clarence Ewen, is extended three months on account of sickness.

Crampton, Capt. Louis W., Assistant Surgeon, will report in person to the president of the examining board appointed to meet at Denver, Colo., on May 14, 1895, for examination for promotion.

Snyder, 1st Lieut. Henry D., Assistant Surgeon, is granted leave of absence for two months, to take effect upon the conclusion of his examination to determine his fitness for promotion.

Gibson, Capt. Robt. J., Assistant Surgeon, will be relieved from duty at Fort Sam Houston, Texas, by the Commanding Officer of that post, and will report in person to the Commanding Officer of Fort Thomas, Ky., for duty at that post.

Crampton, Capt. Louis W., Assistant Surgeon, is granted leave of absence for ten days, to take effect from the date of the conclusion of his examination for promotion.

Gardner, Maj. Wm. H., Surgeon, is relieved from duty as Attending Surgeon and Examiner of Recruits at Headquarters Department of Dakota, and ordered to Fort Reno, Oklahoma Territory, for duty at that post, relieving Major H. M. Cronkhite, Surgeon.

Cronkhite, Maj. H. M., Surgeon, is granted leave of absence for four months, on surgeon's certificate of disability, with permission to leave the Department of the Missouri, to take effect on being relieved from

duty at Fort Reno, Oklahoma Territory.

THE NAVY.

Two weeks ending May 18, 1895: *White, S. S.*, P. A. Surgeon, is ordered to the U. S. S. "Bancroft" June 8th, 1895.

Baker, J. W., P. A. Surgeon, ordered from the "Enterprise" and Recorder Navy Medical Examining Board.

Barnum, M. W., Assistant Surgeon, resigned from the Navy May 7th, 1895.

Boyd, Robt., Assistant Surgeon, resigned from the Navy May 8th, 1895.

Drennan, M. C., Surgeon, ordered for examination preliminary to promotion.

Wilson, H. D., Assistant Surgeon, detached from "Vermont" and to the "Monongahela."

Beyer, H. G., Surgeon, ordered to the U. S. S. "Monongahela."

Young, L. L., Assistant Surgeon, ordered to examination for promotion.

Olcott, F. W., P. A. Surgeon, from the "Constellation" and to the "Enterprise."

MARINE HOSPITAL SERVICE.

Wheeler, W. A., Surgeon, detailed as chairman board for physical examination of applicants for appointment in Revenue Cutter Service, May 13th, 1895.

White, J. H., P. A. Surgeon, detailed as recorder board for physical examination of applicants for appointment in Revenue Cutter Service May 13th, 1895.

Carrington, R. M., P. A. Surgeon, granted leave of absence for ten days, May 4th, 1895.

Cobb, J. O., P. A. Surgeon, granted leave of absence for fourteen days, May 1st, 1895.

Miscellaneous Items.

The next issue of the JOURNAL will contain the report of the Board of Medical Examiners in Goldsboro, with

a list of the licentiates and the examination questions. We may also give some of the answers by some who failed.

There were present at the Goldsboro meeting representatives of the following popular houses: Messrs. Parke, Davis & Co., Messrs. Sharp & Dohme, Messrs. Wm. R. Warner & Co., Messrs. Bartlett, Garvens & Co., Harris Lithia Water Co., E. A. Yarnall Co., Malted Milk Co., Dios Chemical Co., Messrs. H. K. Wampole & Co., Messrs. G. F. Harvey & Co.

STATE BOARDS OF MEDICAL EXAMINERS.—At the recent conference of State Boards of Medical Examiners, held in Baltimore, steps were taken to effect a permanent organization. The meeting was presided over by Dr. Quine, of Chicago, and Dr. L. J. Picôt, of North Carolina, was elected Secretary *pro tem*. Drs. Chas. McIntyre, of Pennsylvania, W. W. Potter and H. M. Payne, of Buffalo,

N. Y., were appointed a Committee on Constitution and By-Laws. The following officers for the next meeting were elect: *President*—Dr. W. W. Potter, Buffalo, N. Y. *Vice-President*—Dr. J. M. Hays, of Greensboro, N. C. *Secretary*—Dr. B. M. Griffith, Springfield, Ill.

Medicine is the title of a new medical monthly which is published by the well-known medical publisher, Mr. Geo. S. Davis, Detroit, Mich. The Journal is edited by Dr. Harold N. Moyer. The first number has been received and deserves to take a front rank among medical monthlies. It contains sixty-four pages of reading matter—original papers, book-notices, progress in medicine. This issue is well illustrated, one illustration being a lithograph. There is no editorial in the first number.

Reading Notices.

MALARIAL CONDITIONS. — For all malarial conditions quinine is the best remedy we have; but associated with this condition there is always more or less pain, which often renders the life of the individual uncomfortable, if not positively miserable. Antikamnia will remove these unpleasant symptoms and place the system in the best condition for the quinine to do its work. In headache (hemikrania), in the neuralgias, in anæmic patients, who have malarial cachexia, and in a large number of affections more or less dependent upon this cachectic condition, the regular administration of this combination will produce the most happy results. In cases of malarial

fever it should be given as a prophylactic and cure.

ANÆMIOL.—On page 5 of this issue will be found the advertisement of this new preparation just placed upon the market by Messrs. H. K. Wampole Co. It is a preparation of beef, containing hæmoglobin and albumin, and is a highly nutritious food, which will prove of great benefit in the gastro-enteric diseases now so prevalent, as in other wasting diseases.

The preparations of "PEPSIN," made by Robinson-Pettet Co., are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house. (See page 13.)

NORTH CAROLINA MEDICAL JOURNAL.

A SEMI-MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. XXXV.

WILMINGTON, JUNE 20, 1895.

No. 12.

Original Communications.

ANNUAL ESSAY—EMPIRICISM.*

By R. H. STANCELL, Jr., Margarettsville, N. C.

It is our custom, ladies and gentlemen, to hold annual meetings of this Society, which is, so to speak, our common mother, our standard for judging each other's characters, and beloved by all of us, and at those meetings held in the various large towns of the State, in rotation, we have established the custom of presenting to the general public an essay and an oration prepared and delivered by one of our members. This year the oration fell to my lot, and I am thus given an opportunity to renew my acquaintance with Goldsboro. Walking your streets and reading your signs recalls other days, when I stopped here on my journeys to and from La Grange and the school there. It is pleasant to think of happy days and to greet old friends anew. I have first to thank the nominating committee for conferring this honor on me. I accept it with a due sense of its importance and my inability to do it justice.

Since these papers are for the general public, it is not well to select a subject which involves too much technicality, and, on the other hand, it is the orator's affair to amuse, the essayist's to instruct, and this is a golden opportunity to endeavor to present to the audience food for reflection in regard to some of the many crying evils which menace the present public health and the future well-being of society. There are many such evils among us, thanks to the cupidity and ignorance of mankind. I shall confine myself to the history, causes, results and present condition of one of them. I therefore invite your attention to some considerations of the subject of

EMPIRICISM,

that is to say, Quackery. The word is derived from the Greek "emperikos,"

*Read before the North Carolina Medical Society, May 15, 1895.

a searcher after facts in nature, or experimentalist; but it long since degenerated from such a meaning. This was perhaps due to the fact that the empiric threw aside the reasoning faculties in his work because he did not need them, and therefore the profession of empiricism became synonymous with vulgar ignorance. Quackery exists in everything. There are pettifogging lawyers who are quacks, ranting preachers who are quacks, camp-followers and stragglers in war time who are quack soldiers, and there are quack doctors, whom, like the poor, we have always with us.

The most expressive definition of the quack doctor is: "A man who pours drugs of which he knows little into a body of which he knows less"; and, while this was applied by its brilliant originator to the entire medical fraternity, it so plainly refers to quacks that it is worthy of mention.

The history of empiricism is an interesting study in human nature extending over ages and serving as an indicator to point out and a monument to perpetuate the memory of the follies and weakness of man at every age and stage of his existence. It is as old as is medicine itself, having been the only kind of medical science which the Egyptians possessed, and the Jews, deriving their knowledge from the Egyptians, pursued the same plan; hence the marvellous entered largely into every cure, and the sacred writings furnish numerous proofs of this weakness of the human mind. It was the Greeks who first cultivated physic as a branch of philosophy and reduced the mass of accumulated facts to a system. From the specifics of the temple and the rubbish of popular credulity Hippocrates gave medicine the garb of a science and so enriched it with experience and observation that his writings are still worthy of consideration, but he could not overcome the fondness for empiricism; while men of science and honor and seekers after truth followed his dictates and improved his plans, popular credulity preferred the charm, the amulet or the wonder-working nostrum.

At the time of Galen and Celsus empiricism was a regular system, having been reduced by Serapion. He saw the field of medicine occupied by his brother physicians, who acted upon and strove to improve the doctrines of the day. Being desirous of taking a short cut to fame and wealth, he proposed to treat all diseases by a simpler method. He proclaimed it foolish and unnecessary to study pathology or etiology, the nature and cause of disease, and declared it was only necessary to be acquainted with the action of drugs in order to be a physician. These opinions of his were held by numerous followers who taught that, by accumulating a mass of fixed facts, invariable rules of procedure could be established in certain cases. There have been empirics ever since, but of late years they confine themselves to advertisements and do not presume to argue or expound their views in the presence of scientists. Like the stragglers of an army, they are quiet and humble in the presence of a soldier, but woe to the wounded or weak who come in their way.

Empiricism gained additional strength at a subsequent period by the introduction of chemistry into medicine. Its fanciful theories were aided by the dreams of the early alchemists. Paracelsus was the first to proclaim a hope of immortality to mankind by the use of his chemicals, few in number, though said to be all powerful; but Paracelsus died young and gave the lie to his boastful assertions, though his deluded votaries still continued to teach his methods.

Chemistry alone, however, did not keep this searching after short-cuts alive. The charm of healing in certain diseases has been claimed as a royal prerogative, and the mere touch of the sovereign's hand has been held sufficient to cure diseases of the most loathsome kind.

The influence of the royal touch began in England with Edward the Confessor. It was one of the artifices which this pious Prince used to excite respect, and his successors, however little they may have believed in it, did not lay aside the imposition. A form of prayer was even composed to be said during the ceremony and was employed as late as the time of Charles I. His son and successor did not believe in the practice, and is said to have had his hand roughly handled at various times. And it is said that he even made cures, giving sight to the blind and smoothing the fungus of a republican nose. His neice, Queen Anne, of pious memory, was the last to dispense the gift, and one of the last recipients was the learned Dr. Johnson, who really ought to have known better.

Empiricism received its first check at the hands of King Henry the Eighth, who acquiesced in the foundation of the College of Physicians, which examined into, and passed upon, the qualifications of all those who desired to practice medicine. The idea of its establishment first originated with the celebrated Linacre, who communicated it to the great Cardinal Wolsey. Henry was anxious to reform medicine in order to take its practice from the priests, into whose hands it had almost entirely fallen.

The chief hot-bed of empiricism at that period was Germany, which, being the fertile school of alchemy, naturally fostered errors and ran to elixirs and wonderful potions.

Perhaps the most noted empiric of this period was one Antony. He was an Englishman, educated at Hamburg, who, on his return to England, announced the discovery of a most wonderful panacea extracted from gold. He published a treatise in support of his theory. It required a treatise to advertise a nostrum in those days, the *Caucasian* not having been founded. Paracelsus first showed that the metals possessed powers as medicines and the alchemists continued wedded to his opinions. They held that since gold was the first or King of metals, it ought to possess unlimited powers in the treatment of disease, could a proper solution of it be made.

Antony's potable gold brought him into persecution, but gained a comfortable living for his son. The zeal of quackery found wonderful hopes for

good in other bodies too. The air was supposed to contain a vital principle which the empirics strove in vain to concentrate and exhibit. It was abandoned and another object, "An original matter," which contained the principle of immortality and was supposed to reside in gold, was chased till, like the *ignis fatuus*, it disappeared in the darkness and left its silly followers to struggle out of the slough, into which it had led them, as best they might.

Another fallacy of the time, called judicial astrology, held that the celestial bodies influence the human frame. As far as humans go, this idea long since disappeared, but it is now, even, believed by numbers of people in this State that meat butchered in certain phases of the moon will lose largely in weight and that a wounded animal will bleed more profusely during the moon's increase than during its wane. Such was the progress of empiricism till the beginning of the eighteenth century, when it became divided between pseudoscience and open trade. Under the first of these come the early electricians and also galvanism; under the second the selling of rostrums from the stage and warehouse. Electricity in the hands of the empiric, Graham, promised the art of living in the world a hundred years with health and happiness and the propagation of offspring far more beautiful, both mentally and physically, than the present race of puny and probationary mortals, who crawl and fret and politely play at cutting each other's throats for nothing at all on this terraqueous globe. But Graham, like Paracelsus, died young and set no example of the truth of his precepts.

Galvanism, better known as mesmerism, gained its greatest *eclat* in the hands of Mesmer, a German. He proposed to cure all diseases by what he called animal magnetism. His house was converted, with seeming benevolence, into a hospital, where crowds of the lame, halt and blind came and went away cured. Its bubble burst in Germany, however, and Mesmer fled to Paris, where he formed a society for diffusing the art. The pupils he bound by oaths to secrecy, but their conduct was so manifestly reprehensible that the government ordered a commission to enquire into the discovery. Dr. Benjamin Franklin and Lavoisier were members of this commission, which declared in its report that the effects were produced by the influence of the mind of the empiric over that of the subject. The powers of imagination being aroused by contact and excited sensibility were easily directed by the practiced stronger will, until results arose which were astonishing and oftentimes entirely unexpected. This report put a stop to it for a while, but presently it rose again in the form of Perkins' Metallic Tractors. These were two bits of metal possessed of supernatural powers. A society was formed to extend their benefits, but they are no more. They had their day of greatness attested by the clergy and nobility. The Archbishop of Canterbury actually endorsed them, but recently, when a set of them was presented as a curiosity to a medical society, they were so utterly forgotten that it was necessary to have a committee search for their history *Sic transit gloria mundi*.

The charm is fled, they are no better than two skewers, for Haygarth's experiments fully exposed the fallacy. Finding that two thin bits of iron could no longer be sold for five guineas, Mr. Perkins quietly decamped with what he had accumulated.

The stage and patent medicine warehouse were now the favorite working places of quacks—the stage is the elder of the two. There the quack could descant upon the virtues of his preparations after bringing the audience into good humor by the tricks of a clown who preceded him. The dress of each was well suited to his part. The doctor in green and gold and the clown in a fantastic rig.

The green ointment and alterative pills always found a sale among the populace, and, as a proper set of patients was always at hand to avouch the truth of every miracle, the doctor met a courteous reception as he travelled from town to town.

But the stage did not suit the taste of every quack nor could patients be so easily supplied with nostrums from it as in a more private situation. Thus the patent warehouse came to be opened. The quack found it the best place for the sale of his nostrum, for patients could buy it there amid the multiplicity of articles without their conduct's being observed.

By far the greater number of these nostrums are taken either from the Pharmacopœia or else they are the private formulæ of physicians, which have fallen into the hands of persons absolutely ignorant as regards drugs, who either believe them good for every malady or else deliberately advertise them to be cure-alls when they know better. So great has been the popular favor for patent medicine that the regular druggist has been compelled either to sell them or lose by far the greater portion of his trade. The evil has grown until to-day fully one-half of every drug store is devoted to patent medicines.

This may be said to be the history of the evil. Its real origin has been in the hearts of wicked men since the days of Adam. Whenever anything succeeds it is sure to be imitated, and there are always to be found men who are only too glad to live by imitating and claiming knowledge which they do not possess, but which they are able to make the ignorant think they possess.

PRESENT CONDITION AND DIRECT RESULTS.

So much for its origin and history. Born of ignorance, reared, continued and propagated by the ignorance of the masses through ages, it to-day holds sway to an enormous extent throughout the entire world, but especially in America. Physiology and hygiene, which common-sense would suggest as being the proper study for children, are ignored in most schools entirely and receive only a casual bit of attention in any. Well has it been said: "The proper study of mankind is man," but the legislators and instructors of to-day take the stand that anything else but man is his proper study. This

does not apply to Goldsboro, however. After our entertainment of last night it is clear that through her excellent schools she is laying in a stock of healthy boys and girls who are sure to do credit both to their fair city and our beloved State.

The American people are a reading people, but there is no other thing of which the average American is so profoundly ignorant as of the structure and function of his own body. Nine people out of ten think that the same tube serves to convey air to the lungs and food and water to the stomach, while the fallacies of the torpid liver and "taking cold" are not even confined to the laity. Regularity of habits is unknown in this country, and whenever there is irregularity some ill-result must follow. When it happens what does the average man do? If it be irregularity in his shoe, he consults the cobbler; if it be irregularity among his buttons, he places himself in his wife's hands; if it be irregularity in his watch, he speeds to the jeweler; but if it be irregularity in his stomach or brain, does he consult the skilled workman? No, he takes down his bottle of patent stuff which he has seen advertised somewhere and he proceeds to dose himself. He recognizes the delicacy and value of his watch and does not understand its delicate arrangement of wheels, levers and jewels, and he dare not interfere with their frail continuity by thrusting a rude hand into the delicate mechanism. He does not recognize the marvellous beauty and the wonderful construction of his stomach and entire system, the nervous system ruling the whole yet influenced by any, nor, above all, does he know and understand, as far as man can understand, that wonderful power of interstitial change which is the difference between living matter and dead. Yet, in his ignorance, he dares to rudely meddle with his very life.

And, strangest of all, let some one who is familiar with the delicacy of this machinery but speak to warn him of the risk he runs, and what does he answer? You are a doctor—of course you are going to say it is wrong because it hurts your business. And it takes but few such answers to check the zeal of the most earnest. The doctor goes on his way knowing only too well that every dose of patent medicine taken is a direct increase in that doctor's bill which the ignorant one will surely have to make when nature rebels against the irregularities, imprudence, excesses and dosings to which she has been subjected.

Almost every person uses these drugs to some extent, and statistics prove that a large proportion of opium fiends begin the habit in this way, while many of these nostrums contain alcohol and are often the exciting cause of its terrible hold. They are sold in almost every general store, in all groceries and in most drug stores. Any one is at liberty to prescribe, buy or sell them; and this is strange, for if a person wishes to practice medicine he must undergo rigid examinations and prove himself competent; if he would be a druggist, he must serve an apprenticeship and then register, but any one, however

ignorant or incompetent, is at liberty to prescribe, buy and sell these drugs which are advertised to do more than any doctor dares promise, and contains ingredients which druggists are not allowed by law to sell.

The traffic in such medicines is something enormous, there being no restrictions upon the sale of them and there being such a large profit upon them. Thus a pint of cheap red wine, two ounces of sulphuric acid and enough water to make a gallon, when mixed and placed upon the market under a high-sounding name, sells for three dollars. The market is flooded with drugs guaranteed to cure all the ills the flesh is heir to, and year by year the traffic grows. Some of these drugs occasionally do good, no doubt, as they are, in most cases, either taken from the dispensatory or else are the prescriptions of some physician, but the wrong is not in the drugs themselves so much as in their indiscriminate use and ignorant application.

While the people in general have advanced so far in the last two centuries in matters pertaining to government, architecture, transportation, manufactures and all the other branches of knowledge, they have not stirred an appreciable inch in obeying the philosopher's command, "Man, know thyself"; for while the upper classes of late years are somewhat improved, the majority of the people are to-day as deeply ignorant of themselves as were their forefathers two hundred years ago. For instance, there was no more wildness in supposing potable gold to cure all ills than there is in supposing Radam's Microbe-Killer to do so; there was as much probability of the existence of an essential matter in gold as there is of the existence of a bichloride of that metal.

Mesmer's animal magnetism was no worse than the hundreds of galvanic and electric belts advertised daily. And the Archbishop of Canterbury's endorsing the Metallic Tractors of Perkins was no worse than the advertisement, in the papers of this State, of a Justice of the Supreme Court's certificate attesting the miraculous qualities of the "Electropoise." These sad facts *prove conclusively* that the people in general know no more now of themselves than those who lived two hundred years ago did. The existence of empiricism is an evil, in the present age a great evil, the own true child of ignorance and greed; but let a scientist declare that the high-sounding theory of some new fraud is false, and he is immediately accused of personal motives. The medical profession has been abused from the beginning of quackery by all quacks, and thus ignorance and calumny are enabled to defy knowledge and truth by crying to the ignorant that the doctors abuse their products because they are opposed by them.

These people catch at any and every new idea which promises to attract attention to their wares. No theory is too fanciful to be advanced and no statement too manifestly untrue to be made by them in their advertisements. They know that the intelligent classes will not know enough of nature to tell whether their claims are possible or not. And that the ignorant people know

absolutely nothing of such things. They also know that every person has some idea of his body's structure and mode of action, however wrong that idea may be. And they know that the influence of the only class who can expose them can be neutralized by the cry of self-interest, and accordingly they grow rich at the wrecking of thousands of otherwise healthy bodies.

“Alas for the rarity
Of Christian charity
Under the sun.”

The liquor traffic does no more harm to the race than this. Oh, what a field for the prohibitionists. A few of the most bare-faced fallacies of the day may be mentioned without offence.

The electropoise is said to put the skin in such condition that oxygen readily passes through it and enters into the capillary circulation. Every chemist knows that such a state of affairs would in a few moments effect spontaneous combustion and leave the body ashes. Keeley's wonderful anti-liquor salt is said to be bichloride of gold. Chemists know that as long as gold and chlorine preserve their present valencies there can no more exist a bichloride of gold than there can a bi-pig-ate of chicken or bi-horsate of man, and so on; one can find somebody silly enough to believe any theory or fancy. There is no notice taken of the traffic by the law. It seems strange to require a druggist to register and be examined before he can dispense prescriptions, and at the same time to allow any person who chooses to dispense the same drugs when they are disguised in some mixture and patented.

Another fallacy is the inhalation of oxygen. “The inhalation of oxygen,” says S. Colis Cohen, in *Hare's System of Therapeutics*, “has had more or less enthusiastic advocacy since the days of Priestly.” Especially have advertising quacks in America, for the basest purposes of selfish gain, exploited oxygen and its mixture with nitrous oxide under various taking names, reaping for themselves a bountiful harvest of dollars and for death a bountiful harvest of lives. Newspaper proprietors and magazine publishers are not without responsibility in this matter, for the conscienceless scamps who prey upon the misery and the credulity of their fellows, have been quick to perceive and to avail themselves of the reading habits of the American people, and their deadly falsehoods are carried, on the covers and in the most conspicuous columns of the best and the worst journals and periodicals, into the homes of the credulous rich and cultured, as into the tenements where the credulous poor and ignorant are herded.

Physicians, as guardians of the public health, owe it as a duty to the community to denounce and expose this crime against the weak and helpless and to arouse in the consciences of the accessories a just recognition on their part of the wrong, nor should we longer shirk this plain duty because of the fear of the flippant reproach of interested motives. Should we not be interested

beyond measure in the rescue of the sick from their enemies and in the purification of the profession of healing from the stain that camp-followers and mercenaries bring upon it? In God's name, then, let us, being without reproach, have no fear of the taunts of the thoughtless and of the sordid, but lend our best endeavors to save the community from parasites more deadly than the tubercle bacillus.

As has been already stated, nothing can be too wild or chimerical for the gullable people to believe. Barnum says: "Truly the American people love to be humbugged." Thus a nickel ring on the little finger, is said to prevent and cure rheumatism. But perhaps of all the crazes which ever existed those higher-priced preparations, the ingestion of which, it is claimed, makes labor easy and robs confinement of its horror, while insuring the safety of both mother and child, are the craziest. Yet numbers of people believe it to be true and purchase the article at an exorbitant price. And this leads to mentioning a few bare facts concerning the average woman. She is not by any means confined to the poor and unlearned classes either. Two great necessities, contingent upon mere physical existence, confront every woman; by conformity to their laws she must win or lose, live or die. Nature insists upon self-preservation and preservation of the species. Moreover, she scorns to perpetuate a deteriorating type. How little the ordinary wife and mother, even in these boasted *fin-de-siecle* days, knows of the real significance of life and of those mighty forces which know no deviation; and how little she is prepared for the parts she must needs play, whether she will or no, in this fierce struggle for mere survival. If it takes three years of constant study and clinical experience to fit a man to wait upon a woman in confinement, and to faithfully discharge the few small duties nature has left undone at the time, how much longer ought it to take to fit that woman for the part she has to play in the preceding months and for the responsibility which she then assumes for life. Perhaps some of this Society's members know of women who can translate German, read French at sight and scan Latin hexameters and paint flowers, but who could not, for their lives, tell (when they had become mothers) how much clothing the baby needed nor if it was being properly fed. What all women need as a preparation for the highest function of their lives is thorough training in some fundamental principles of anatomy and physiology. Suppose the above-mentioned woman had been taught anatomy and physiology as persistently as she was Latin and perspective, would not her children have a better chance? And is it not the duty of every parent to give his children every possible advantage in this race for the survival of the fittest which we call life?

All women should be taught these things and trained to observe them. That training should begin at an early age, so that when menstruation begins it should be expected and understood. From fourteen to eighteen or twenty the young woman's training and education, in school and out, should be to-

ward physical perfection. Systematic exercise in the gymnasium and out of doors should be a daily certainty, and the full process of gestation and parturition, with the development of embryo, and the growth and needs of the infant, should be unfolded in continuous instruction. Any interference in the order of development would thus be taken in its incipency and interference with nutrition be promptly checked and righted. When women turn their attention to acquiring fitness for motherhood there will be a great decrease in the number of sick women and a marked increase of intellectual power in men. Oh, let it be soon.

Pardon this digression to come back to patent medicines. If such medication is a necessity it ought to exist, but it ought to be placed on an equal footing with other necessities, sugar, for instance. Why should not the government profit by this traffic as it does by the manufacture of sugar, or rather, why should we not pay a tariff to New England on evil things as well as on good ones? If these articles are to be thus indiscriminately employed why should not government make them subservient to its interest by taxing both those of domestic and foreign manufacture. Assuredly the lives of our citizens should be guided by their representatives from foreign enemies and domestic treachery, whether it come in the form of a bayonet, a bolus or a pill.

So much for the medicines and apparatus, now about quack doctors. Their methods are manifold and strange. One establishes institutes, advertises to treat all diseases at so much per month and furnish medicines, and has crowds of patients. Another takes quarter, half and whole-page advertisements in the newspapers, travels in a private car, heals by faith and has hundreds flock to him; he continues this for a certain length of time, then his advertising stops and he fades away—jailed for fraud. Hundreds of others advertise themselves as specialists in some form and try to see how much they can abuse honorable practitioners. They travel when they have played out. One of their favorite so-called specialties is catarrh, which they make out to be a dreaded constitutional disease quite beyond the power of the average practitioner. Their spelling, however, is generally poor outside the advertisement. Another specialty much harped on is, as the advertisements read, all irregularities of the genital system. Their advertisements frighten ignorant people into going to them or trying their specifics. They are old specialists always, have been in practice for years, guarantee a cure and consultation free.

North Carolina is not much infected with this particular species, thanks to the wise law which requires physicians to prove themselves competent before they can practice.

He is seen here, though, in two forms—one of these is the "Scientific Optician," who calls himself Professor in his advertisements, but Doctor everywhere else; who advertises to fit glasses to all eyes, and says on his card, "consultation free." He uses simple methods, can fit glasses to old people

fairly well when they have only presbyopia, but will injure the eyes of any young person for whom he prescribes and fits glasses, for the reason that he has no right to use mydriatics, and hence dares not. During the past year one of these has been going from town to town advertising himself as a doctor and an eye specialist, and publishing in the papers certificates as to his ability and being what he claimed to be, from some of this Society's most prominent members. It is needless, of course, to say that these gentlemen never gave any such certificates.

The other form is the physician who, after failing to get or keep a practice in the usual way, begins to advertise in the newspapers and get himself puffed. Sometimes he opens a sanitarium for the treatment of something special, sometimes he goes from town to town advertising himself as a specialist. In either case well-informed people scrupulously avoid him and his methods.

There arise year by year sects and schools of all sorts of empiricism. Christian science is one of those which, after a few years of existence, has just built a temple in Boston, the home of isms, at a cost of two hundred thousand dollars. They hold that man is incapable of sin, suffering and death, and that all material things may be overcome by simply exerting the will. Thus one gravely says that she awoke one morning with an abscess in the throat, which disappeared in the course of the day without opening. The chief of the sect claims to have set and kept set several broken bones by faith, although she admits that it required great faith, more than the average subject possesses.

“When Bishop Berkley said there was no matter,
And proved it, 'twas no matter what he said;
They say his system 'tis in vain to batter—
Too subtle for the airiest human head,
And yet who can believe it—I would shatter
Gladly all matters down to stone or lead,
Or adamant, to find the world a spirit,
And wear my head denying that I wear it.”

HOMŒOPATHY.

Of all the many mediæval dreams we have spoken of, there is only one whose survival challenges our attention at the present time, and this is the so-called Homœopathy or Hahnemannism. The essential doctrines of Hahnemann were three: The first of these taught that chronic disease is the result of a general poisoning of the system by a humor, which, when it finds its way to the surface, causes the itch. Microscopic investigations and the discovery of the itch insect long since gave the quietus to this theory.

The second doctrine of Homœopathy is the so-called infinitesimal doses.

This is not a simple affirmation of what every one knows to be true, namely, that certain substances are so octave in their relation with the body that the most minute quantity of them impresses it; nor is it a statement that all or any drugs in minute quantities exert an influence antagonistic to the effect which they produce when in large quantity. It does teach that a substance like chalk, which is, in large doses inert, becomes, under the influence of trituration and dilution, possessed of intensely active properties, as though there had been liberated from it a spirit of healing which had been imprisoned in its natural grossness. He also taught that the activity of a medicine depends upon the number of times it has been shaken and that medical inertness by excessive shaking might be converted into almightiness. Remembering the numbers of his followers, surely the bitterness of Carlyle seems justified when he said: "Where ten men are gathered together, there are nine fools."

It is the third doctrine which has been, and still is, the rallying point of his followers, and which is claimed to be the fundamental truth of his teachings—this is the so-called law of *similia similibus curantur*, in accordance with which a symptom produced by a disease is to be cured by a small dose of a remedy which, when given freely to a healthy man, will produce the same symptoms. This law, which has immortalized the name of Hahnemann, was really laid down by Hippocrates 2,300 years ago—it must possess some measures of truth to have survived so long. And it will sometimes lead to a good result. Let us suppose a case of vomiting. Ipecac, when given in large doses, will cause vomiting, but under certain circumstances, when given in minute quantity, it will relieve it. Witnessing such administration, the by-stander cries, "Great is *similia similibus curantur*, and Hahnemann is his prophet." But let another case appear which is increased by ipecac and relieved by opium, which does not vomit when given to the healthy man, but makes him insusceptible to the action of emetics. Now, the upholder of *dissimilia similibus curantur* cries: "Behold, I have the truth—the remedy which produces the opposite of the symptom is the remedy to relieve the symptom." It is plain that the truth lies in neither. A law of nature has no exception, and if exceptions be found to an alleged law it is plain that the law is only an allegation and not a reality. If we were to find that at times weight disappears and objects not supported fail to fall, then we would know that the Newtonian generalization of the attraction of gravity was not a law. Neither Homœopathic nor Allopathic doctrines are laws; they are mere expressions of coincidences, each of them base coin, gilded with just enough of truth to pass current with the ignorant and unwary. Symptoms are the mere surface play of disease, marking only with great uncertainty the currents, whirlpools and rocks that lie hidden far underneath. Symptoms apparently the same may be the outcome of bodily conditions differing widely. Any system of treatment based directly and immediately upon

symptoms must be untrue. It is not possible to find any therapeutic law which shall directly relate symptoms to remedies and enable the practitioner in ease and ignorance to combat disease.

In Europe the fallacy has almost played out, there being only 1,022 practitioners of Homœopathy in all Europe, by far the most of whom are in Spain, the lowest country there intellectually.

In America, and particularly in New England, it is holding its own, probably, because individualism here runs riot and we have irregularities of all kinds in religion, philanthropy and medicine.

The peculiarities of the people and the deficient qualifications of the regular profession in those States where there is no law regulating practice are other causes, but the most notorious of all is—the American Homœopath does not practice Homœopathy. This is acknowledged by the New York Homœopathic Medical Society, and has been by them repeatedly affirmed in the *New York Medical Times*. They have also proved that every one who disputed the statement was wrong, and that many physicians who denied practicing in any way except by their dogmas were really doing so every day.

In New England, the deteriorated Puritan stock is always ripe for grasping at individualism, and it is not strange that one and the same section should be the home of Homœopathy, Protection and Christian Science.

“Our little systems have their day—

They have their day and cease to be.”

CAUSES.

What are the causes of the quackery which exists in this country to-day? First, the credulity and ignorance of the mass of our people upon all subjects related to physiology and hygiene. Second, the cheapness and convenience of treating oneself without having to confide in a physician. Thirdly, the criminal recklessness with which the soulless press allows itself, for a consideration, to be made the tool and accomplice of these seekers after wealth, by giving up column after column and page after page to the advertising and puffing of their nefarious mixtures. Fourth, the giving of certificates of endorsement by persons who are supposed to be in a position above reproach. Thus, certificates of preachers are much sought after, and there are few papers which do not contain a certificate from some preacher endorsing some nostrum. Fifth, certificates from physicians, which is worst of all. Sixth, unscrupulous druggists.

The ignorance of the public in regard to matters pertaining to the body is woeful. More knowledge must be carried to them or the race will finally dwindle away to nothing. Public schools are now required to teach physiology to some little extent. It ought to stand next in importance to reading in the list of studies. When people know how to treat and care for their

bodies the necessity for medicines of all kinds will decrease. It is clearly evident that physiology and hygiene are not popular subjects with the people. Why is it? Every one will concede them to be the most important, and every one will agree that health is the most precious of all man's possessions, yet it would be almost impossible to fill a small hall with persons willing to listen to a lecture upon hygiene. The reason is that most persons have heard nothing about it till they arrive at maturity, when they theorize that, if they have lived thus far without paying attention to such a subject, they are willing to risk it the rest of the way. It is because its importance has not been impressed upon the young people—the boys and the girls.

The cheapness of these medicines as compared with the fees of a physician is a powerful argument in their favor to the uneducated mind, and the privacy is the greatest inducement, perhaps, to a certain class. A man finding himself afflicted with some trouble, or a woman annoyed by some irregularity, must of necessity feel a delicacy in confiding their ills to any one. This is, to some extent, true modesty, than which there can be no brighter virtue, but let them but begin with patent medicines from either of these motives, and in most cases they eventually fall into the doctor's hands, and that, too, with the cost, and the shock to modesty increased in direct ratio to the time spent in trying to avoid the natural consequences of wrong-doing or heredity.

The cause of all others, however, is the advertising in the newspapers. The press is the most powerful engine the sun shines on, and verily the pen is mightier than the sword. The average man of the people believes everything he sees in print, and to his mind the flaunting half-page advertisement is as true metal as the brilliant editorial. That it is wrong to allow such advertising of quack remedies no one can doubt, but the papers allow it even when they know the claims set forth are preposterous misstatements, intended only to deceive the public.

Civilization, says Donan, culminates in the power of the press and the bounds of civilization are limited by the circulation of the daily papers. There is no civilized speech nor language where their voice is not heard or their influence not felt. There is no enterprise, or business benefaction, or villainy that cannot be pushed into triumph or driven to failure by the newspapers. Great reputations are created by them out of nothingness and wrecked by them for amusement. In this country governors, senators and even presidents are made by them—often of material intended for tinkers and peddlers, base-ball players, gamblers, shysters, pickpockets and thieves.

A few weeds soaked in bilge water, or a little calomel rolled in sweetened dough, with plenty of printer's ink, will make a millionaire of any pauperistic quack in five years time, whether it is the brains, hearts, livers, lungs, kidneys or gizzards of newspaper-reading gudgeons, his humbug panacea claims to regenerate.

To say nothing of the practice of certain dailies in charging a great price for their subscription and then making one-third of their matter patent medicine advertisements, from a business standpoint. If a grocer was to make a third of his sugar sand, he would be quickly condemned; why, then, should the press be allowed to insert such vile things as the big **G** advertisements and those of tansy and pennyroyal pills in the columns which all people, refined or not, are to read. The press has unlimited influence over the minds of a great class. Their influence amounts, certainly, in this country, to power. Power has never yet been abused, but that it reacted and severely injured the abuser. There will be a reaction at some time in this case.

The practice of giving certificates as to the efficiency of these things is a field which it is difficult to clear.

Many a preacher, hard up for cash or some other object, gives a certificate to these people, which they publish. Very many preachers take the mixtures and perhaps very many are benefited at the time and give the testimonials in good faith; as to those who give them for the first mentioned cause, nothing further need be said. Those who are honest and are asked to do so, should remember that patent medicines have become an evil of the greatest magnitude, against which it is the duty of every person who wishes well to society and the race to oppose the barrier of his judgment, as well as against the numerous quacks themselves, who thus ravage the purses and constitutions of the dupes of their barefaced impositions. That when they sign such an instrument they cast their own good name and character against all honest effort, true philanthropy and the cause of science.

What can be said of the physician who so bemeans his art and judgment as to publish endorsements of these preparations? It is usually found that he either has never received a degree or that he graduated from some one horse medical school, where attendance upon two five months courses of so-called lectures was the principal requirement for graduation. This particular kind of doctor is rapidly being exterminated since the *debut* of the State examining boards except in Kentucky, where he is said to flourish still in his pristine glory.

The last cause to be noticed in this paper is the unscrupulous druggist. Druggists are at times unscrupulous. An ignorant person comes into the shop. One-half of it is filled with patent articles which yield an enormous profit. The patient states his case, the druggist recommends a nostrum, which the ignorant person purchases and retires with. Sometimes this program is varied by the purchaser asking to see a doctor, when the druggist says to him that he had better tell him what his trouble is, and, after learning it, he persuades the patient to purchase a nostrum, or else prescribes for him himself. Of course it is the height of empiricism for druggists to prescribe, and honest ones will not do so except in an emergency, when a physician cannot be had. Druggists are found who excuse their prescribing and keep-

ing quack medicines for sale on the ground that they are in the drug business to make money. Yet we find their national association passing resolutions to the effect that the drug clerks employed in the army and navy should have the rank and pay of commissioned officers. Of course men who pursue a trade simply for the money they make out of it, can never be anything but tradesmen, that is, they can never lift their trade to a higher and more honorable level, and if pharmacy is to be only a trade to make money out of, then its usefulness to the physician and the public is at an end, for the druggist is a necessity only when he serves the interests of three classes; should he neglect either of the three his usefulness decreases in exact proportion. His first care should be to protect and properly serve the patient. Next he should look to see that the physician's interest is protected, and when he has done this well, the gratitude of both physician and patient enable him to amply look after his own.

REMEDY.

And where, pray, is the remedy?

It can be expressed in one short word, and that word is education. The ancient empirics strove for many a visionary panacea. Had they employed the same effort in teaching the people what was then known of nature's laws, how much better it would be now for the race. You must see to it that the children of to-day are taught to respect, understand and care for their bodies as well as their minds, and their physiques must be cultivated and developed as carefully as their mental faculties are.

The importance of hygiene must be impressed upon the young people from the A.B.C. book through the school and high school and into the University, at which latter place it ought especially to be impressed. The study of Latin and the other dead languages and the higher mathematics are, it is true, most excellent mind-training, but none of them better than physiology, and there is no study more interesting when properly taught. And taught these things must be before the world grows much older.

When the people know as much as they can about the laws and conditions governing their bodies, the high-flown theory will not be so enthusiastically believed nor the accompanying drugs so readily swallowed.

The honorable profession of Medicine, which has throughout the ages calmly watched the rise and fall of thousands of hobby theories and nostrums, realized long ago that these things would exist just so long as the people are ignorant and credulous; therefore, through all the years honorable physicians have striven to teach man his duty to his body. Slowly year by year are their efforts being crowned with success and more and more concerning nature is being studied in the schools.

It is the duty of every well-wisher to the race to cast the weight of his influence with the right side; it is the duty of every parent to see that his children are taught these things, and it is the duty of every one who can to know them; no matter if you have lived twenty, thirty or fifty years without them, you should still find time to read on these things, and having read them to consider well.

There is no reason to believe that empiricism will ever cease. Most probably, like the gold brick swindle and the green goods fake, it will continue to be an heritage to the ignorant even from generation to generation. But as knowledge increases it will grow less; for knowledge is the only panacea,

Society Reports.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Forty-Second Annual Meeting, held in Goldsboro, May 14, 15, and 16, 1895.

SECOND DAY—AFTERNOON SESSION.

(Continued from page 294.)

Dr. A. H. Harris made his report as Chairman of the Section on Gynecology, the paper being referred to the Committee on Publication.

Dr. Bahnson said that it has always been the policy of the Society to restrict to the utmost limit the list of honorary members. At present there are only two on the list who have not been active members of the Medical Society of North Carolina for a period of years. The Society had always tried successfully to add no one to that list who did not confer upon it an honor equal to that the Society endeavored to confer upon him. Fully recognizing that fact, he desired to move that the names of Dr. W. W. Keen, of Philadelphia, and Dr. L. McLane Tiffany, to Baltimore, be added to the list of honorary members of the North Carolina Medical Society. Adopted.

Dr. Joshua Tayloe, of Washington, Chairman of Section on Obstetrics, presented a paper on "Abortion and Its Management."

Dr. T. S. McMullan, of Hertford, read a paper entitled "The Rational Treatment of Puerperal Eclampsia."

Dr. Haigh moved that the paper be referred to the Committee on Publication, with the request that it be published. He considered it an unusually fine paper, every part of it tallying with the other—everything unnecessary seems to have been left out. It seemed to be a paper that will do good.

On account of the absence of Dr. John R. Irwin, of Charlotte, his paper on "An Obstetric Resource and Necessity" was read by title and referred to the Committee on Publication.

Dr. Francis Duffy, of Newbern, read a report of "Cases of Hypertrophic Nasal Catarrh, Treated by Electrolysis"; "Case of Malignant Tumor of Knee-Joint"; "A Case of Complex Error of Refraction of Eyes"; which were referred to the Committee on Publication.

Dr. W. H. Wakefield, of Charlotte, read a paper entitled "Corneal Ulcers."

Dr. J. C. Walton offered the following resolutions:

Resolved, That the licentiates of the Board of Medical Examiners, at its present session, be added to the list of members of this Society upon notification to the Secretary by the Treasurer of the payment of their initiation fees.

Resolved, That any physician in the State in good standing and legally qualified to practise medicine may be similarly admitted upon recommendation of two members in good standing in this Society.

This motion would involve an amendment of the Constitution and therefore discussion and action were postponed until next year.

Dr. F. H. Russell, of Wilmington, read a paper entitled "Puerperal Septic Infection—Its Prophylaxis and Treatment of Infection Through the Uterus."

On motion, the order of business was suspended and the Society went into the selection of a place of meeting for the next year.

An invitation from the Edgecombe County Medical Society to the State Society, to meet in Tarboro, was read by the Secretary.

It was moved that the next meeting be held in Winston-Salem.

A standing vote was taken, Winston-Salem receiving 29 and Tarboro 17. Winston-Salem was therefore declared to be the place of meeting of the Society in 1896.

The Society adjourned to meet at 8:30 p. m.

SECOND DAY—EVENING SESSION.

The Society was called to order at 8:30 p. m.

In a few appropriate words the President introduced the Annual Essayist, Dr. R. H. Stancell, Jr., of Margarettsville, who read his essay, entitled "Empiricism," before the citizens of Goldsboro.

The Orator of the occasion Dr. W. P. Mercer, of Elm City, was also introduced by the President, and delivered the Annual Oration, his subject being "The Cradle."

Dr. Thomas Hill, of Goldsboro, read, by request of the Society at its last meeting, a paper on "Native Materia Medica," which was instructively illustrated by stereopticon

The Society then adjourned till to-morrow morning at 9:30 a m.

THIRD DAY—MORNING SESSION.

The Society was called to order at 9:30 by the President.

On motion, the Society returned a vote of thanks to Drs. Stancell and Mercer for the essay and address.

Dr. W. S. Anderson, of Wilson, read a paper entitled "Uncontrollable Vomiting of Pregnancy." Referred.

Dr. Thomas Marshall was introduced to the Society.

Dr. Thomas Riddick, of Woodville, as Chairman of the Section on Therapeutics and Practice of Medicine, read his report, entitled "Pneumonitis in Childhood."

The Nominating Committee offered the following as their report, which was adopted:

Committee on Legislation.—A. W. Knox, K. P. Battle, Jr., J. L. Nicholson, W. H. H. Cobb.

Committee on Publication.—R. D. Jewett, W. C. Galloway, D. W. Bulluck, A. H. Harris, G. G. Thomas.

Board of Censors.—W. O. McDowell, H. H. Harris, Thomas E. Anderson

Annual Orator—H. H. Dodson.

Annual Essayist—W. P. Ivey.

Leader of Debate—H. A. Royster.

Obituary Committee.—W. J. Jones, R. D. Jewett, J. C. Montgomery.

Delegates to the American Medical Association.—R. H. Stancell, Jr., D. T. Tayloe, Oscar McMullan, H. B. Weaver, J. A. Burroughs, J. M. Faison, P. E. Hines, G. M. Bell, D. G. Caldwell, A. Cheatham.

Delegates to the Southern Surgical and Gynecological Association.—J. S. Lafferty, W. H. Bobbitt, R. A. Whittaker, D. A. Stanton, C. A. Julian, L. W. Hunter.

Delegates to the Virginia Medical Society.—W. H. Harrell, R. H. Whitehead, J. C. Walton, S. L. Montgomery, B. L. Long, N. H. Street.

Delegates to the South Carolina Medical Association.—J. C. Montgomery, T. F. Meisenheimer, J. C. Black, L. L. Sasser, A. J. Battle, John C. Blount.

Delegates to the American Public Health Association.—Albert Anderson, W. T. Pate, W. H. Lilly, A. J. Crowell.

Delegates to the North Carolina Pharmaceutical Association.—W. C. Steele, G. W. Lewis, C. M. Benton, W. C. Sanford.

Delegates to the American Pharmaceutical Association.—J. W. McGee, Jr., J. H. Marsh, Paul A. Barrier, W. D. Pemberton.

Dr. Thomas R. Marshall read a paper entitled "Scarlet Fever." Referred.

Dr. R. J. Grimes read a paper on "Dietetic Regimen in the Treatment of Disease," which was referred to the Committee on Publication.

Dr. A. B. Pierce, having to leave for home, read a paper on Phthisis Pulmonalis by title, and it was referred to the Committee on Publication.

Dr. W. E. Fitch, of Durham, read a paper entitled "Cholera Infantum." Referred.

The Obituary Committee made its report, which was referred to the Committee on Publication.

On motion, the regular order of business was suspended and the Society proceeded to the installation of officers.

Dr. Haigh and Dr. Hines were appointed to escort the incoming President to the Chair.

The retiring President thanked the Society for the honor shown him in placing him in the position of President, which is the highest honor that the Society can bestow upon a member, and handed the gavel to his successor, congratulating the Society upon the wisdom of its choice.

Dr. Payne, in accepting the insignia of office, expressed the wish that he might perform the duties involved upon him as faithfully and as creditably

as Dr. Tucker had done, and, though he accepted the position with a profound sense of unfitness, yet he desired to serve the Society as best he might.

Dr. F. Homer Arthur, of Harrell's Store, read a paper entitled "Whooping Cough." Referred.

Dr. S. J. Montague, of Winston, read a paper entitled "Therapeutic Use of Tobacco in Parasthesia, with Report of a Case of Pruritus Hiemalis."

Dr. P. B. Loftin, of Grifton, read a paper entitled "Hemorrhagic Fever."

A paper, entitled "Remarks on the Treatment of Typhoid Fever," by Dr. E. F. Strickland, of Bethania, was read and referred to the Committee on Publication.

Dr. Montague moved that thanks be tendered to the people of Goldsboro for their kind reception and entertainment of the members of the Society. Carried.

Dr. R. A. Patterson read a paper entitled "Treatment of Diphtheria," which was referred.

Dr. Grimsley made a verbal report of the following case: The patient came to his office some time in June, 1892, stating that he had diarrhœa of two months standing, accompanied by pain in the lower bowel, and Dr. Grimsley diagnosed chronic diarrhœa and prescribed pepsin and bismuth, and as an injection carbolic acid. That relieved for a while, but in about two months he came back and stated that it had returned accompanied by severe pain in the bowels. The same prescription was given again, with a solution of nitrate of silver, ten grains to the pint, and he was told to take it once a week. He went on with that treatment from time to time, with only temporary relief, until the latter part of June, 1894. He was then taken with what seemed to be an acute attack of dysentery, severe pain and straining and discharge of blood and mucus. The prescription that time was three compound cathartic pills, and through the night they acted very freely and he passed this stone (which was exhibited). The evening before passing the stone he said he could detect something hard that would not come away. Since that time he has had no diarrhœa and has been well. The weight of the stone is seven drachms. There was no history of any hepatic colic. The man had always been a hard drinker all his life.

On motion, it was decided to hold the next meeting of the Society on the second Tuesday in May, 1896.

The President announced the following appointments of chairmen of sections and committees:

Section on Pathology and Microscopy.—Dr. D. M. Prince, Laurinburg

Section on Practice of Medicine.—Dr. I. W. Faison, Charlotte.

Section on Anatomy and Surgery.—Dr. J. L. Nicholson, Richlands.

Section on Materia Medica and Therapeutics.—Dr. John C. Montgomery, Charlotte.

Section on Medical Jurisprudence and State Medicine.—Dr. J. C. Walton, Reidsville.

Section on Obstetrics.—Dr. C. A. Julian, Thomasville.

Section on Gynecology.—Dr. John Blount, Washington, N. C.

Section on Chemistry and Physiology.—Dr. W. H. H. Cobb, Goldsboro.

Committee on Duffy Prize.—Dr. R. S. Young, Concord; Dr. I. M. Flippen, Thomasville; Dr. S. W. Stevenson, Mooresville.

Committee on North Carolina Medical Journal Prize.—Dr. Geo. G. Thomas, Wilmington; Dr. J. W. McNeill, Fayetteville; Dr. W. B. Crawford, Goldsboro.

It was suggested that the subjects for these prizes should be published with the Transactions.

The following is a list of names reported favorably by the Committee on Credentials:

Drs. George H. West, R. S. McGeachey, J. S. Brown, W. D. Bowen, F. H. Russell, J. C. Montgomery, W. E. Murphy, C. E. Moore, W. L. Kirkpatrick, H. A. Royster, F. W. Whitehead, W. T. Turlington, R. D. Ross, W. O. Baskerville, J. W. Saine, Joseph Dixon, B. W. Best, John Thames, John T. Strickland, J. C. Rodman, C. M. Jones, John B. Carr. For reinstatement, Drs. W. H. Cobb, Jr., and F. H. Arthur.

The following resolution was unanimously adopted:

• *Resolved*, That the Medical Society of North Carolina tender thanks to the physicians and citizens of Goldsboro for the kind and Hospitable manner in which we have been entertained while with them, and especially would we express our appreciation of the entertainment by the Graded School teachers and the ladies for their very pleasant social courtesies.

On motion, the Society adjourned, to meet in Winston-Salem on the second Tuesday in May, 1896.

J. H. TUCKER, M.D., President.

R. D. JEWETT, M.D., Secretary.

BOARD OF MEDICAL EXAMINERS OF NORTH CAROLINA.

Regular Meeting, held in Goldsboro, May 13th, *et seq.*, 1895.

The Board of Medical Examiners of the State of North Carolina met at Goldsboro Monday, May 13th, at 9 o'clock, a. m. There were present Drs. W. H. Whitehead, President, L. J. Picôt, Secretary, J. M. Hays, J. M. Baker, George W. Long, H. B. Weaver. Dr. Thos. S. Burbank reported for duty during the session.

There were 64 applicants and of these 53 were licensed and 11 refused.

Dr. Lee Cohen, of Newbern, N. C., won the Appleton prize on a grade of 97.4, and Dr. Chas. L. Minor, of Asheville, N. C., stood the next highest examination, his grade being 97.3. This will probably entitle him to a second

prize from Messrs. G. H. Harvey & Co., Saratoga Springs, N. Y. It was a noteworthy fact that the general character of the examinations was higher than ever before in the history of the Board, and a larger per cent. of applicants licensed during the past five years. The same grade of 80 per cent. was required as in former years.

An extra session of the Board will be held this summer at Asheville, N. C., due notice of which will be given in this JOURNAL.

The following is a list of licentiates: Drs. Thos. C. Gibson, Winton, Goode Cheatham, Henderson, F. L. Potts, Washington, Earl Grady, Tryon City, S. M. Crowell, Mint Hill, James L. Bullock, Greensboro, J. H. Fouts, Franklin, C. E. McCoy, Franklin, O. H. Kenan, Kenansville, A. G. Thompson, Waderville, J. H. Alston, Townesville, E. H. Brooks, Monroeton, Jasper N. Anderson, Albemarle, T. C. Walker, Randlemann, M. Olivia Ne Lon, Asheville, T. V. Goode, Cherryville, C. L. Minor, Asheville, F. D. Crim, Hot Springs, N. A. Thompson, Lumberton, W. W. Whittington, Asheville, M. P. Blair, Clover, S. C., W. H. Crowell, Poortith, R. S. Turlington, Bennettsville, S. C., C. V. Reynolds, Asheville, N. M. Gibbs, Fairfield, G. W. Presley, Charlotte, G. A. Hood, Newton Grove, T. C. Hamrick, Henrietta, J. V. Williams, Evalin, E. R. Russell, Rockingham, E. M. Brevard, Charlotte, B. F. Halsey, Roper City, N. C. Daniel, Satterwhaite, J. L. Spruill, Columbia, A. J. Eller, Reedy Branch, Stanford L. Warren (col.), Durham, L. G. Frazier, Oxford, J. C. Hammack, Walkertown, LEE COHEN, Newbern, W. S. Hay, McAvensville, M. D. Bowen (col.), Clarkton, E. L. Stamey, Morehead City, Edwin Klebs, Asheville, James M. Parrott, Kinston, W. G. Shaw, Font Col, R. P. Morehead, Lasker, F. L. Siler, Dillsboro, W. S. Jones, Goldsboro, F. H. Homes, Clinton, J. W. Rodwell, Macon, J. R. Reitzel, Pineville, E. T. Dickenson, Fremont, H. T. Aydlett, Elizabeth City,

W. H. WHITEHEAD, M.D., President.

L. J. PICOT, M.D., Secretary.

TO RENDER SPONGES ASEPTIC.—After many experiments in his laboratory, M. Meillere, Director of the Paris Academy of Medicine, gives the following method of rendering sponges aseptic: The shells and stones are first picked out by hand, then the sponges are beaten to remove sand, etc. They are then placed in a 1 to 100 solution of hydrochloric acid for four hours, and next washed and immersed in a cold solution of permanganate of potash; next follows a bath in a solution of sulphurous acid, after which they are washed until all traces of the last acid have disappeared. To preserve until needed, keep them in 5 per cent. carbolic acid, 1 to 100 bichlorid or 1 to 300 of thymol solution. To cleanse sponges which have been used once, they are washed in green soap, rinsed in warm water and carried through the treatment mentioned above. It is advisable to submit them to a bacteriologic examination before using again.—*Ex.*

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR.

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This JOURNAL is published on the fifth and twentieth of each month, and any subscriber failing to receive his copy promptly, is asked to announce the fact to this office.

Cuts will be provided for any original communications (sent to this JOURNAL only) requiring illustrations, free of cost to the author.

Secretaries of County Medical Societies in the Carolinas are asked to furnish condensed reports of their meetings to the JOURNAL.

All communications, either of a literary or business nature, should be addressed to, and remittances made by P. O. Order, Draft or Registered Letter, payable to ROBERT D. JEWETT, M.D., P. O. Drawer 810, Wilmington, N. C.

Editorial.

The Goldsboro Session of the Board of Examiners.

We have received the report of the regular session of the Board of Examiners held at Goldsboro, and it will be found on another page of this issue. We have heard with regret and astonishment that they were persuaded to give a license to Dr. Edwin Klebs, of Asheville, without an examination. If this be true, it is a direct violation of the most liberal construction of the Medical Laws, no provision appearing which allows the conferring of honorary license, or license without examination. The opinion of the Attorney General to this Board in 1890 does not cover this

case at all. He said that the law, no doubt, allowed the Examiners a wise discretion in the matter of licensing candidates, that they were empowered to regulate the character of the questions asked and the standard of excellence which must be made to appear in order to justify the issue of a license. There were several applications made to the Board during the year 1890 for new licenses by parties who had previously been before the Board, and their licenses were of record in the proceedings of the Board. The petitioners asked for new licenses because the ones previously granted had been mislaid and they wanted renewals in order to procure registration. There appeared before

this same meeting of the Board another set of petitioners, who belonged to the second class mentioned in the registration act, namely, those who were in active practice prior to the seventh day of March, 1885. These physicians, although not licentiates, were entitled by the act to register at any time before the first day of January, 1890, provided they exhibited a diploma issued by a regular medical college prior to the seventh day of March, 1885, or made oath that they were practising medicine or surgery prior to the same date. There were in several counties men of prominence and substantial characters who had failed to register within the required time, and the Attorney General said that it was within the power of the Board to issue to these men licenses to correct the mistake they had made in not registering within the prescribed time. Clearly these two classes were deservedly licensed—the first, because having obtained a license once, and the fact being of record, they could demand a reissue of the license in the place of the one they had lost; the second, because the provisions of the law covering the cases of those physicians in practice prior to March, 1885, were of the nature of an amnesty act, and the registration was intended to make all these classes equal before the law. But the amnesty clause had a definite term of action. This term has closed, and no man, however eminent, is now supposed by the law to be licensed without an examination.

Section 3, 122 says:

“No person shall practice medicine,

“or surgery, or any of the branches
“thereof, nor in any case prescribe
“for the cure of disease, for fee or
“reward, unless he shall have been
“first licensed so to do in the manner
“hereinafter provided.”

Section 3, 124 says:

“It shall be the duty of the said
“Board to examine all applicants for
“license, etc., and if on such exami-
“nation they be found competent, to
“grant to each applicant a license.”

These, then, are the laws and a fair statement of the cases in which it was declared the Board had discretionary power to deviate from them. It would in no wise have detracted from the fame of Dr. Klebs, or infringed upon the dignified position he has attained in the profession to have gone before the Board and submitted himself to such questions as were propounded to the other applicants for permission to prosecute (lawfully) their professional work in North Carolina. It appears, in fact, that Dr. Klebs had no wish to have the laws of the State violated for his benefit. He presented himself for examination in prescribed form—or intended to do so—being a *bona fide* citizen of the State and wishing to conform to all the laws and usages governing good citizens. There is no cause of complaint against Dr. Klebs. His ability is world-wide and co-equal with his fame. It is the unfortunate misconception of the laws, or rather of the powers of the Board which we most earnestly deprecate, and the unwise action that has established a precedent which, we hope, will never be followed or quoted as authority for a similar mistake.

The adjournment of the Board before they had finished the examina-

tion of the papers submitted to them was another error and without sanction of law.

Section 3, 127, after providing when and where the Board of Examiners shall assemble, says:

"And the said Board shall remain in session from day to day until all applicants who may present themselves for examination within the first five days after its meeting shall have been examined and disposed of."

We beg leave to call the attention of the Board to the fact that these candidates must not only be examined, but the result of the said examinations must have been canvassed and *disposed of* before the Board has performed its duty and can adjourn.

We have a most earnest sympathy for the workers on this Board. The labor is incessant and trying, but the duties and responsibility of the office cannot be put aside or the laws relaxed. The spirit and letter must be accurately carried out, if the proud boast of the profession of the State is to be sustained—that its laws were simple, concise and exact, and that they were obeyed. We are sure that only a reminder is necessary to recall to the gentlemen constituting the present Board the fact that great responsibilities are attached to their office and that the profession of North Carolina relies upon them to execute the laws fully and with equal justice to all who come before them.

Reviews and Book Notices.

Suggestive Therapeutics in Psychopathia Sexualis; with Especial Reference to Contrary Sexual Instinct. By Dr. A. von Schrenck-Notzing (Munich, Germany). Authorized translation from the German by Charles Gilbert Chaddock, M.D., Professor of Diseases of the Nervous System, Marion-Sims College of Medicine, St. Louis; member of the American Medico-Psychological Association, etc., etc. One volume, Royal Octavo. 325 pages. Extra cloth \$2.50 net; sheep, \$3.50 net. Sold only by subscription to the medical profession exclusively. Philadelphia: The F. A. Davis Co. Publishers, 1914 and 1916 Cherry Street.

The volume before us is a fitting companion piece to the work of von Krafft-Ebing. The subject is treated under three sections, Section I. being devoted to Sexual Hyperæsthesia; Section II. to Sexual Impotence and

Anæsthesia; and Section III. to Sexual Paræsthesia.

The author tries to find the causes for and the pathological conditions that accompany these unnatural desires, and with the citation of cases succeeds in producing a most disgusting volume, fit (?) for "the medical profession only." The treatment seems to be almost entirely by hypnotism

Transactions of the Antiseptic Club. Reported by Albert Abrams, a member of the San Francisco Profession. Illustrated. Octavo; cloth; 205 pages. Price \$1.75. E. B. Treat, 5 Cooper Union, N. Y.; 1895.

This volume is intended to amuse its readers. It is a burlesque on the

use of antiseptics. Parts of it are well laden with risible absurdities well calculated to entertain one during a few idle moments, when the weary mind refuses heavier food.

Abstracts.

EXPERIMENTAL MALARIA.—The following conclusions have been drawn from an extensive article by Di Mattei (*Archiv für Hygiene*, Bd. xxii. Heft 3). Malarial infection can be brought about in men by both intravenous and subcutaneous injection. In the latter case not less than 2 c.cm. of blood should be injected. The time of incubation varies, but is usually between ten and fourteen days. Tertian, quartan and irregular fevers are due to three different parasites, and the injection of blood containing one variety reproduces the type of the primary case, and with similar organisms in the blood. Inoculation from cases of mixed infection produces correspondingly atypical diseases. If the organisms of one type are injected into the body of a person with a fever of different type, the course of the disease may be changed.

Inoculation with the blood of a malarial man cannot reproduce the disease in a lower animal; all kinds of animals, including monkeys, having been tried. The parasites found by Danilewsky in birds, and claimed by him to be identical with human malarial protozoa, have analogies with the latter, but are essentially different from them. They cannot be grown in the human body; they do not produce similar changes; they are not affected by quinine or arsenic.—*Am. Jour. Med. Sci.*

ON THE DIAGNOSIS OF RUPTURE OF THE INTESTINE.—Brendt states (*Deutsche Zeitschrift für Chirurgie*, 39 B., 5 u. 6 Heft) that after a contusion of the abdomen the following conditions may be taken as indicative of rupture of the intestine:

1. The absence of liver-dullness (Moritz).
2. Frequent and uncontrollable vomiting.
3. The appearance of peritonitis, if lesions of the kidney, bladder, liver and spleen can be excluded.
4. Spontaneous pain in the abdomen is not of itself of much diagnostic value.

Regarding the advisability of operating in these cases, the author says:

1. If there is unmistakable evidence of rupture of the intestine, immediate laparotomy is indicated.
2. Exploratory laparotomy after contusion of the abdomen is usually to be avoided; in uncertain cases, expectant treatment should be adopted (Moty).
3. If soon after the injury (twenty-four to thirty hours) there are signs of sepsis, operation is contraindicated. A low temperature with marked constitutional symptoms is an especially unfavorable condition.
4. Rapidity and delicacy are essential in operating for rupture of the intestine, especially if peritonitis is present. Therefore, a long abdomi-

nal incision, rapid, systematic examination of the intestine, avoiding rough tearing or handling; if possible to avoid it, do not resect the intestine; employ simple Lembert sutures, or at most a wedge-shaped resection of the injured portion of intestine, and close with a simple running suture, including the muscular and serous coats. Flushing the abdominal cavity with antiseptic liquids is to be avoided. —*Ibid.*

THE ETIOLOGY AND TREATMENT OF INFLAMMATIONS OF THE UTERINE APPENDAGES.—Dr. Augustin H. Goelet, of New York, read a paper on this subject at the recent meeting of the American Medical Association at Baltimore, in which he stated that the contention was not that these inflammations of the tubes and ovaries can always be cured, but that it is frequently possible, and, unless immediate operative interference is absolutely demanded, the patient should be given the chance, and the attempt should be made before submitting her to a radical operation. This he thought particularly important, since treatment directed toward attaining this end did not militate against a subsequent operation for their removal should it become necessary; but, on the contrary, improved the chances of an ultimate successful result. He called attention to the fact that, when once removed, these organs cannot be replaced, and, asked the question if it was not a serious error, in the light of recent developments in the etiology and pathology of the inflammations of the appendages, to remove these organs without previous attempt at a cure or removal of the

cause which may be operating to maintain such condition.

It may be denied that diseased tubes and ovaries are removed unnecessarily, but it must be admitted that they are too often removed for disease which is amenable to patient and persistent treatment, or which may be cured by a minor surgical operation, involving no risk, such as curettage or repair of a lacerated cervix.

If these cases are submitted to careful treatment, instituted for the purpose of clearing up the surrounding exudation and favoring drainage through the natural channel (the uterus), in many instances the necessity for a radical operation would be removed, and the woman would be restored to a life of usefulness and happiness.

In corroboration of these views, he reported 12 selected cases which had come to him from other gynecologists, who believed that removal of the diseased organs was the only method to be adopted for restoration of their health, yet these patients recovered completely without the loss of these organs.

The writer stated that these were not the only cases with such an unfavorable outlook which he had been able to cure in this manner, but they had been selected from among a number of others because they had consulted other gynecologists before they came under his observation.

THE USE OF CHLORINE IN THE TREATMENT OF TYPHOID FEVER.—Wilcox (*N. Y. Med. Record*) In a paper read before the Medical Society of the State of New York, Dr. Wilcox calls attention to the value of chlorine

in the treatment of typhoid fever. Experience, he says, has shown that it can be taken in quantity sufficient to be antiseptic, and stimulant to certain organs, without producing injurious effects. It stimulates respiration and the heart's action, and notably increases the flow of saliva and the bile. By its action on the kidneys it assists in the more rapid elimination of toxins. In typhoid fever, the use of chlorine in moderate doses lowers the temperature, calms nervous disturbance, cleans the tongue, improves digestion and has a favorable action on the intestinal ulceration. The writer uses one to four fluidrachms of chlorine water every two to four hours.—*Int. Med. Magazine.*

TREATMENT OF BONE AND JOINT TUBERCULOSIS.—Neuber (*Archiv für klinische Chirurgie.*) The author reports fifteen cases, of which fourteen are cured and one remains under treatment. In eight there was primary union, in four cases secondary union without suppuration, while in two cases there was a slight amount of pus. These results were obtained by the use of a ten per cent. glycerin emulsion of iodoform, which the author used for its well-known specific

action in tuberculous cases. The author opens the joints, removes all fungous, tuberculous masses and necrosed tissues, washes out all the pus, removes necrotic bone and sequesters, and then pours over the entire tuberculous area a ten per cent. iodoform glycerin emulsion. After the joint has been opened and the diseased tissues removed, he unites the joint capsule by a buried suture, the superficial tissues by an ordinary interrupted suture; the wound is not drained but firmly closed. Over the wound he lays a small amount of iodoform gauze held in place by adhesive plaster, and afterwards a dressing, to hold the joint firmly in a fixed position. The cases, so far, include elbow, ankle, foot and hip-joints. When a joint is only partially involved, after opening it, he puts into the sound portion a tampon of iodoform gauze; when all diseased tissues have been removed, he washes out the wound, removes the gauze and floods the whole cavity with iodoform emulsion, closing the wound by means of buried and superficial sutures without damage. The use of the same method in the treatment of other wounds he has found of value in securing primary union.—*Ibid.*

OFFICIAL LIST OF CHANGES IN THE PUBLIC SERVICE.

THE ARMY.

From May 30, 1895, to June 12, 1895:

Maus, Major Louis M., is granted leave of absence for one month and twenty days, to take effect on or about August 10, 1895.

Gardner, Capt. Edwin F., Assistant Surgeon, is relieved from duty as Attending Surgeon and Examiner of Recruits in Boston, Massachusetts, and will report in person to Col. Chas. H. Alden, Assistant Surgeon General, president of the examining board appointed to meet in Washington City, for examination by the board as to his fitness for promotion, and,

upon conclusion of his examination, will report for duty at Fort Grant, Arizona.

Perley, Capt. Harry O., Assistant Surgeon, will report in person to Col. Chas. H. Alden, Assistant Surgeon General, president of the examining board appointed to meet in Washington City, at such time as he may be required by the board for examination as to his fitness for promotion, and, upon conclusion of his examination to return to his proper station.

Richard, Captain Charles Assistant Surgeon, is relieved from duty at the United States Military Prison, Fort Leavenworth, Kansas, to take effect June 30, 1895, and will proceed to comply with the order for him to take station at St. Louis, Missouri.

Town, Col. Francis L., Assistant Surgeon General, is granted leave of absence for two months, to take effect about July 1, 1895.

Ebert, Capt. Rudolph G.—So much of the order as directs Capt. Rudolph G. Ebert, Assistant Surgeon, to report in person to the Commanding Officer at Fort Columbus, New York, for duty at that post, is amended to direct him to report for duty at Vancouver Barracks, Washington, relieving Captain William H. Arthur, Assistant Surgeon.

Captain Arthur, on being thus relieved, will report for duty at Fort Columbus, New York.

Wilcox, Major Timothy E., Surgeon U. S. Army, is granted leave of absence for one month and fifteen days, to take effect on his arrival in New York City, en route to his station in the Department of the East.

Promotions.

To be Assistant Surgeons with the rank of Captain after five years service, June 6, 1895:

1st Lieutenant Frank R. Keefer, Assistant Surgeon. 1st Lieutenant Thomas U. Raymond, Assistant Surgeon. 1st Lieutenant Henry D. Snyder, Assistant Surgeon. 1st Lieutenant Allen M. Smith, Assistant Surgeon. 1st Lieutenant Ashton B. Heyl, Assistant Surgeon. 1st Lieutenant Joseph T. Clarke, Assistant Surgeon.

THE NAVY.

For the week ending June 8, 1895: *Gardner, J. E.*, Surgeon, detached from Naval Station New London, Conn., and wait orders to sea duty.

Biddle, Clement, P. A. Surgeon, detached from Naval Hospital Chelsea, Massachusetts, and to Naval Station New London, Conn.

Rogers, Franklin, Surgeon, detached from U. S. R. S. "Wabash" and to the Navy Yard Boston, Mass.

Neilson, J. L., Surgeon, detached from Navy Yard Boston, Mass., and to the U. S. R. S. "Wabash."

QUESTIONS SUBMITTED BY THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA.

Goldsboro, May 13, 14, 15 and 16, 1895.

DISEASES OF WOMEN AND CHILDREN.

J. M. Baker, M.D.

1. Describe the ovary.
2. Describe the normal position of the uterus, the factors which influence

it and the varieties of pathological displacements of the same.

3. What are the symptoms, physical signs and treatment of laceration of the cervix?

4. Give the symptoms, physical

signs and differential diagnosis of large fibroids of the uterus.

5. Give the diagnosis and treatment of para-metritis.

6. Define retro-pharyngeal abscess and give the symptoms and treatment.

7. Define acute meningitis and give the pathology and treatment.

8. Give the differential diagnosis of scarlet fever, measles, roseola and variola.

9. Describe scabies and give treatment.

10. Give the origin, symptoms and treatment of tape-worm.

PRACTICE OF MEDICINE.

J. M. Hays, M.D.

1. What is the difference between Deodorants and Disinfectants? Give examples of each with method of application.

2. What is Atheroma? What organs are principally affected by this condition, and how?

3. What is the period of incubation in Measles? The initial symptoms? How long after latter before eruption appears? Diagnosis?

4. Give symptomatology of Simple Continued Fever, and state in detail the diagnostic differences between it and fevers of malarial or typhoid origin.

5. Give treatment of Quinsy in its various stages.

6. Give causes, symptoms and treatment of Facial Paralysis.

7. Give cause and treatment of Nephritic Colic. From what is it to be distinguished, and how?

8. What affections of the heart are due primarily to Rheumatism?

9. What are the symptoms of An-

tero-lateral Sclerosis and Locomotor Ataxia respectively?

10. Give symptoms and treatment of Chronic Gastritis. Write out in full two prescriptions for same.

SURGERY.

W. H. Whitehead, M.D.

1. Define (a) Ganglion; (b) Arthritis; (c) Lipoma.

2. Give pathology of Tetanus. Treatment for Epididymitis and Balanitis.

3. Name Tumors most frequently found in the breast. Differentiate malignant from non-malignant.

4. Give symptoms of Ulcer of the Rectum. Name varieties of Fistula in Ano.

5. Define (a) Blepharitis; (b) Ectropion; (c) Adenitis.

6. Name varieties of Gangrene. Give pathology and treatment for Anthrax.

7. What are the causes of retention of Urine? Name varieties and treatment for Hemorrhages.

8. What is Erysipelas? How prevented? How treated?

9. Give diagnostic signs of (a) Aneurism; (b) Hectic Fever.

10. Name the inflammatory diseases of the Bones. Give treatment for Potts' Disease.

ANATOMY.

Thos. S. Burbank, M.D.

1. Describe the Axis or Second Cervical Vertebra.

2. Give origin, foramen of exit and distribution of Third Pair of Cranial Nerves.

3. Name Extensor Muscles of Tarsus; give origin and Insertion.

4. Give relations of Appendix Vermiformis and Cæcum.

5. Name coverings of Oblique Inguinal Hernia.

6. Name branches of External Carotid Artery.

7. Describe the Knee-Joint—Bones, Ligaments and Synovial Membrane.

8. Give relations of Femoral Artery in Scarpia's Triangle.

9. Describe the Brachial Plexus.

10. What structures would you divide in amputating the leg at upper third?

MATERIA MEDICA AND THERAPEUTICS.

L. J. Picôt, M.D.

1. Define difference between Heart Tonics and Heart Sedatives and illustrate by mention of several of each.

2. Give symptoms and treatment of Digitalis Poisoning.

3. Give symptoms and treatment of Cocaine Poisoning, naming maximum hypodermic dose.

4. What is the therapeutic use of the Hydrated Sesquioxide of Iron?

5. Give the therapy of the Night Sweats of Phthisis, naming the Anhydrotics particularly.

6. What are Galactigogues and Galactifuges? Name several.

7. Give symptoms and treatment of Bromism.

8. Explain why Potassium Iodide and Mercuric Bichloride are chemically incompatible but not therapeutically so.

9. Give dose and therapeutic uses of Tincture of Strophanthus.

10. What is the dose of Tr. Convallaria Majalis and its therapeutic uses. Give therapy of Argyria. Give dose of Arseniate of Iron.

Miscellaneous Items.

Dr. Carl Thiersch died at his home in Leipsic April 28th, 1895. He was seventy-three years of age. Born in Munich, April 20th, 1822, he studied medicine there and also in Berlin, Vienna and Paris. His name is associated with the method of skin-grafting by wide strips of skin.

Dr. Howard A. Kelly thinks it is coarse to speak of a woman as "a female." "A female is not a woman, but a cow, a mare or any animal of the female sex."

MARRIED.—Dr. Thomas Wright, of Salisbury, was married on the afternoon of June 19th, to Miss Gussie Eliot Coulter, of Newton, N. C.

May long life and much happiness be their lot.

The following is the health report of Wilmington for May, 1895:

Mortality:

	Whites.	Col.	Total.
Population.....	9,000	13,000	22,000
Total deaths.....	13	24	37
Annual death rate represented.....	17.3	22.1	20.2

Metecorological:

Mean temperature, 68°; highest temperature, 96°, on 31st; lowest temperature, 47°, on 15th; total precipitation, 4.37 inches.

UNIVERSITY OF PENNSYLVANIA.—This worthy Institution has just been

made the recipient of a munificent gift of \$500,000 from Provost Charles C. Harrison, in memory of his father, the late philanthropist, George Leib Harrison. The fund is for the establishment of a foundation, to be known as the "George L. Harrison Founda-

tion for the Encouragement of Liberal Studies and the Advancement of Knowledge." A short time before the University received a bequest of a like sum from the late Edward A. W. Hunter, to endow a department of clinical surgery.

Reading Notices.

THE USES OF ARISTOL.—Among the agents for the treatment of wounds which modern synthetic chemistry has placed at the disposal of the physician, Aristol can justly lay claim to a prominent position. Aside from its employment as a wound-dressing, however, it has been extensively utilized in affections of the skin, in diseases of the nose and throat, in ophthalmology, otology, etc. The "Brit. Med. Jour." March 9th, 1895, contains an abstract of an interesting article by Geavert ("Flandre Medicales, Feb. 21, 1895) in which this author gives his experience of the use of Aristol. He says:

"Aristol, which is an iodine derivative of thymol, is a reddish inodorous powder, insoluble in water and glycerine, little soluble in alcohol, but soluble in ether and fatty oils. It has been used with success by Eichhoff in cases of psoriasis, lupus, parasitic cutaneous affections and tertiary ulcerations. In lupus it is said to have given good results and even to have a specific action on tubercle bacillus and the micrococcus tetragenus. Its insolubility renders its use limited to the same extent as iodoform, over which it has the advantage of producing no toxic effects. It can be used as an ointment of 10 per cent. strength, made with olive oil and vaseline. Geavert has used it with

good effect in lupus combined with curetting and quotes a severe case which he treated in this way which healed in five weeks, and has remained healed ten years afterwards. He also recommends it in suppurating bony cavities, and in otorrhœa with large perforations of tympanic membrane. In cases of otorrhœa with small perforations it is dangerous from the liability to block up the perforation and cause accumulation of pus in the middle ear. It is also recommended in burns."

CHRONIC RHEUMATISM.—The two following formulas will be found very serviceable:

[1]

Stearns' Cascara Aromatic, $\frac{3}{4}$ fl. oz.
Sodium Salicylate . . . 160 gr.
Fluid Extract Manaca . . $\frac{3}{4}$ fl. oz.
Simple Elixir, q. s. ad . . 4 fl. oz.

Mix. Sig: Dose, $\frac{1}{2}$ to 2 teaspoonfuls three times a day.

[2]

Elixir Manaca and Salicylate,
(Stearns') . . . 3 fl. oz.
Stearns' Cascara Aromatic, . 1 fl. oz.
Mix. Sig: Dose, 1 to 2 teaspoonfuls three times a day.

J. W. Snowden, M.D., A.E., San Jose, California, on April 12th, 1895, writes: "Your Bromidia acts like a charm. I believe it a safe, effectual and reliable Hypnotic."

